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ABSTRACT

A combination of facts, examples, models, tools, and sources useful in developing and teaching word processing (WP) programs is provided in this guide. Eight sections are included. Sections 1 and 2 present introductory information on WP (e.g., history, five phases of WP, problems occurring in WP offices, factors of people, procedures, and equipment, and the future of WP) and information on WP as it relates to office careers (e.g., way in which WP is organized, degree of WP implementation, work environments, and WP jobs and career paths). Sections 3 through 6 provide information on competencies, learning activities, curriculum models, and special needs students. Sections 7 and 8 include tools and resources to help develop and teach WP programs. Examples of information included in these sections follow: unpublished materials; periodical articles; government, university, and association publications; sample job descriptions for seven WP positions; glossary of WP terms; forms used in WP centers; cluster layouts of WP centers; guide for developing competencies into performance objectives; preparing a proposal for a WP curriculum; and decision-making guide for purchasing WP equipment. (SH)

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Word Processing Curriculum Guide

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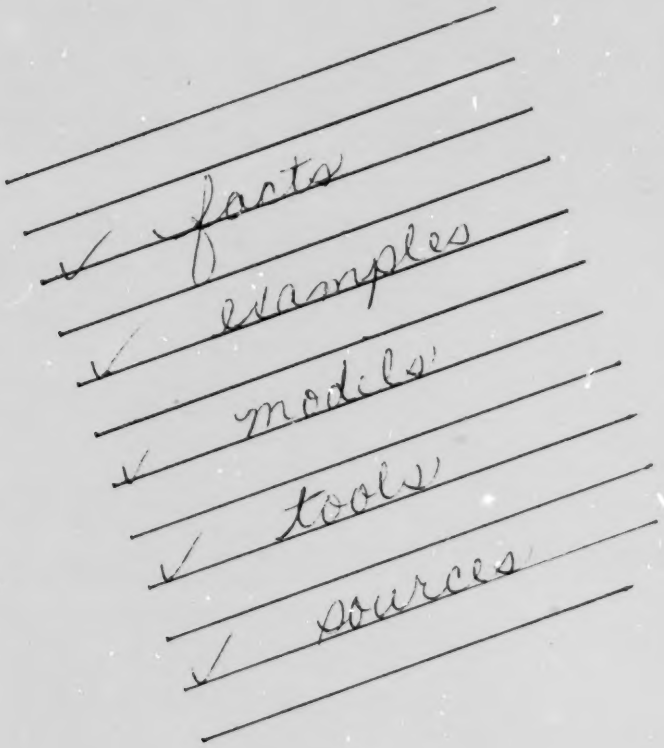
Everything You Need to Know BEFORE Using This Guide:

This guide was written to provide you with a combination of facts, examples, models, tools, and sources useful in developing and teaching word processing programs. To make your reading and our writing easier, we put most of the facts, examples, and models in the front sections and most of the tools and sources in the back sections.



If you want an overview of word processing, you can proceed to Section I. If after reading the first two sections you would like to learn more about how you can teach word processing, return to this page. If you are already interested in teaching word processing, read on.

Sections III through VI provide information on competencies, learning activities, curriculum models, and special-needs students. If after reading these sections you would like to learn about some tools for changing curriculum and classroom teaching, return to this page. If you are already at the point where you need some tools, read on.

Sections VII and VIII include tools and resources to help develop and teach word processing programs.

The following goals and suggested actions are provided to help you plan your use of this guide.

GOALS	SUGGESTED ACTION
Develop Awareness of WP Concepts and Educational Implications	1. Read Sections I, II, III. 2. Read Appendices A, B, C, & D. 3. Refer to Section VII, parts A, B, C, and D for information sources.
Identify Your Curriculum Needs, Your Experience with WP.	1. Complete the Self-Inventory, Appendix E 2. Draw a T-account and summarize WP information on the debit side and outline your present curriculum on the credit side. Do any gaps appear?
Define General Objectives of Education for WP	1. Read Sections V and VI. 2. Review Section III. 3. Review Appendix A. 4. Review your T-account. 5. Review your Self-Inventory.
Identify Constraints	1. List constraints, but don't dwell on them. 2. Refer to Appendices G and J. 3. Refer to Bibliography, check for articles which deal with limited resources.
Generate Alternative Approaches	1. Review Section V. 2. Study Section IV. 3. Refer to Appendices F and H. 4. Feel free to modify the models.
Select the Most Feasible Approach	1. Choose your best alternative. 2. Be ready with Plan B (your next best alternative). 3. Refer to Sections III, IV, V, and VI; and Appendices I and J.
Implement Education for WP	1. Use Appendix F as a guide in developing performance objectives. 2. Use and modify Learning Activities in Section IV.
Evaluate & Provide Feedback	1. Adapt, experiment, grow. 2. Use the feedback form to let us know how you are doing.

TABLE OF CONTENTS

WORD PROCESSING CURRICULUM GUIDE

I. INTRODUCTION TO WORD PROCESSING 8

A. History of Word Processing
B. Factors of People, Procedures, and Equipment
C. Five Phases of Word Processing
D. When Word Processing Typewriters Are Needed
E. Problems Occurring in Word Processing Offices
F. How Organizations with Word Processing Solve Problems
G. Future of Word Processing

II. OFFICE CAREERS AND WORD PROCESSING 18

A. Ways in Which Word Processing Is Organized
B. Degree of Word Processing Implementation
C. Work Environments
D. Word Processing Jobs and Career Paths

III. COMPETENCIES FOR WORD PROCESSING JOBS/CAREERS 26

IV. LEARNING ACTIVITIES FOR DEVELOPING WORD PROCESSING COMPETENCIES 30

V. WORD PROCESSING CURRICULUM MODELS 62

A. The Purpose of Education in Word Processing
B. Models for Education in Word Processing
C. Three Alternative Approaches

VI. WORD PROCESSING FOR SPECIAL NEEDS STUDENTS 70

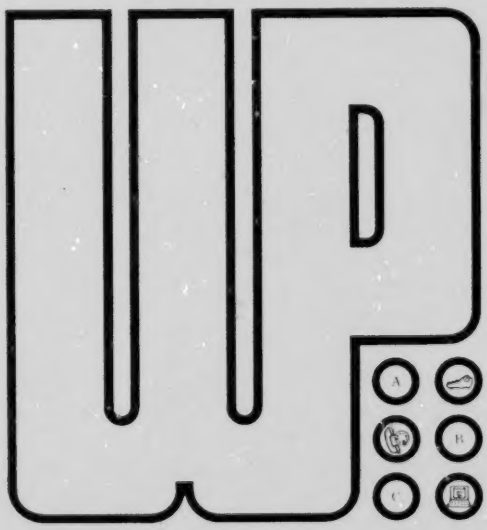
VII. WORD PROCESSING BIBLIOGRAPHY AND RESOURCE MATERIALS 74

A. Periodical Articles
B. Books
C. Government, University, and Association Publications
D. Unpublished Materials
E. Instructional Materials

VIII. APPENDICES 96

A. Sample Job Descriptions for Word Processing Personnel
B. Glossary of Word Processing Terms
C. Forms Used in Word Processing Centers
D. Cluster Layouts of Word Processing Facilities
E. Self-Inventory for Word Processing Teachers
F. Developing Competencies into Performance Objectives
G. Preparing a Proposal for a Word Processing Curriculum
H. Utilizing Community Resources and Advisory Councils
I. Decision-Making Guide for Purchasing Word Processing Equipment
J. Relationship of Word Processing Competency Instruction to Equipment Availability

I. Introduction to Word Processing



PART I

INTRODUCTION TO WORD PROCESSING

Word processing represents the nucleus of a technological revolution taking place within offices worldwide. Few new systems in the history of American business have developed so rapidly as has word processing. The concepts of word processing are in use today in thousands of business, professional, and governmental offices; but if each individual involved in word processing were asked to define it, one would receive a different definition from each. Sometimes when people say "word processing" they mean the entire system of typing and administrative support. At other times, they may be referring solely to the typing activities which are often grouped into something plainly called a Word Processing Center.

Three definitions involving word processing terms are:

WORD PROCESSING: A method of producing written communication at top speed, with the greatest accuracy, the least effort and the lowest possible cost—through the combined use of proper procedures, automated business equipment and trained personnel.

WORD PROCESSING CENTER: (1) The room or area housing equipment and personnel for the production of typed documents. (2) The centralized location in which WP operations take place.

WORD PROCESSING SYSTEM: The combination of specific procedures, methods, equipment, and people designed to accomplish the transition of a written, verbal, or recorded word and distributed to its ultimate user.

The modern concept of word processing has been widely accepted in the business world as connoting a meaning of gaining improvement, efficiency, and reduction of costs in the internal operation of an organization. Additional word processing terms are defined in the Glossary of Word Processing Terms found in Appendix B.

History of Word Processing

The history of word processing is relatively brief. The term originated in Germany during the mid-1960's when Ulrich Steinhilper, an office products manager, devised the basic idea just after the introduction of the IBM Magnetic Tape "Selectric" Typewriter (MT/ST). He coined the term textverarbeitung ("text processing") to describe his theory that if all dictation could be given through one or more central transcribing locations, time and money could be saved because automatic typewriters could be used to produce error-free documents at speeds of 150- to 180-words per minute. (Rosen and Fielden, 1977)

The word processing concept has been subjected to a number of interpretations. The term was often made to appear that the only genuine word processing installation was one comprised of a battery of sophisticated magnetic-media typewriters fed by a complex web of telephone lines and specialized cable connected to dictation stations. This misinterpretation frequently eliminated the small businessperson's interest in the subject, which actually proposes suitable solutions to the needs of the operation of a small business. When the concept is used and implemented logically, word processing can fit profitably into any size firm regardless of the structure of the organization. The correct selection of equipment to match workloads and the efficient use of personnel can make the introduction of word processing productive and profitable in small—as well as in large—office operations.

Factors of People, Procedures, and Equipment

Providing written communication via the word processing concept is accomplished through the use of systematic procedures, personnel trained in word processing system requirements, and technically advanced office and communication equipment.

People. The success of implementing word processing systems is dependent to a large degree on the people participating in the system from management down. The organizations which have made successful transitions to word processing have not been merely "aware" of the needs and attitudes of people as they undergo change, but they have also been keenly attuned to them. The most difficult thing about word processing is not the designing of a system for the particular work at hand, though systems design is important. But rather it is in gaining the cooperation of all the people within the organization for a new way of working together.

The most desirable thing about word processing happens when that cooperation is gained, and work is accomplished faster, more easily, and with less error and commotion. It is then when the people for whom the change was most traumatic and who resisted word processing as an idea which "couldn't work," become its biggest boosters. It is true that if it is to be done well, converting to word processing can be no offhand undertaking. It needs strong and

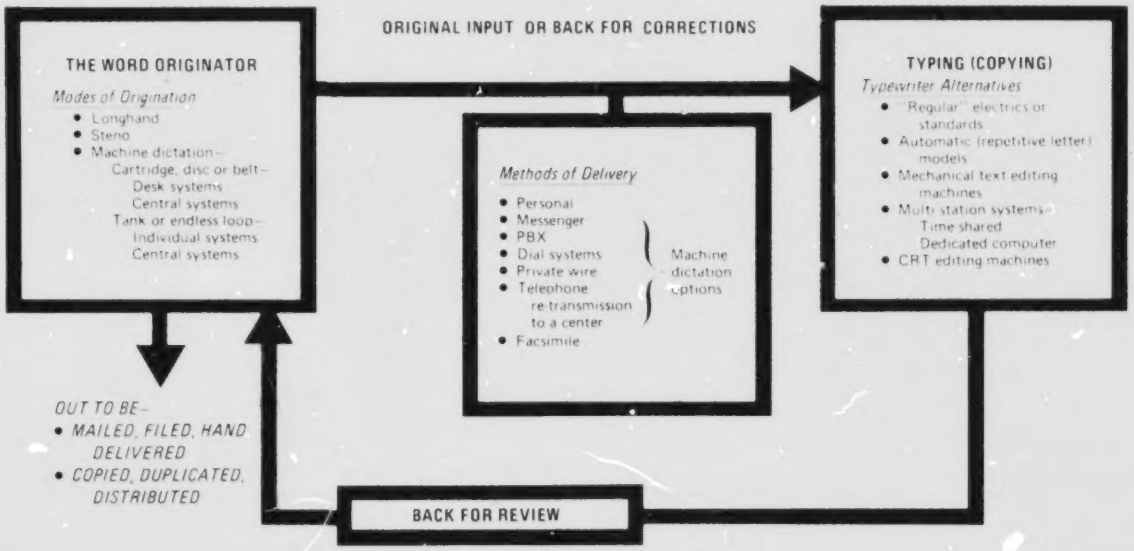
sustained top management backing, strong middle management follow-through, and lots of attention to staffing, training, vendor contracts, office remodeling, and the rest. (The Dartnell Corporation, 1975)

Word processing/administrative support systems are based upon a managed and supervised secretarial organization. People in this organization still receive task direction from the same bosses or principals. But the relationship is a client one, in which the individual serves (or does work for) a client but does not report to or is not supervised by that person. There is professional distribution of work to individuals who have jobs and responsibilities in supervised groups. Typically, these groups consist of corresponding and administrative secretaries. The corresponding secretary is basically a typing technician; the administrative secretary is an assistant who works for more than one office executive in performing tasks other than typing. These two kinds of secretarial positions require people with differenct aptitudes and skills. This allows the work to be accomplished more accurately and efficiently, and hastens and improves the development of the people who work in the support organization.

Procedures. A word processing system is not complete until the procedures for its operation have been decided in precise terms indicating how a document will travel from the author's idea, to the typewriter, and back for signature. The author must know certain things about the word processing system in order to use it. The operators must know who will account for the work and the work flow, who will edit, who will transcribe, and where the work goes once the document is finished. These procedures are precisely outlined in manuals to insure the smooth operation of the system.

This figure depicts the flow of work in a word processing system:

The Word Processing System



Word processing systems should be developed slowly. In a small organization, it may take six months or more before the operation is totally implemented. In a large organization, it may take years before all departments are integrated into the system. Word processing systems are not so totally "new" that they fail to respond to the timeless principles of good management. The idea of controls, for example, while perhaps new to the secretarial area, in substance is no different than the controls management imposes on many other areas of the organization. They cover a multitude of cost items, as well as the salaries, promotions, and personal-fulfillment requirements of the staff.

In developing word processing systems, too often people search for an equipment solution to a people problem. In a word processing system, people and procedures account for 85 percent of its success or failure. (Management Introduction to Word Processing, 1975)

Word Processing Equipment. The two basic categories of word processing equipment are input and output.

Input equipment includes all types of dictation equipment such as central dictation systems, portable units, and desktop models.

The central dictation system allows dictators from various locations to call dictation into the word processing center. This dictation is stored on magnetic belts, disks, or tapes. It is then transcribed from the centralized system directly onto the automatic typewriter recording media.

Individual desktop dictation equipment is most appropriate for principals who spend a great deal of time dictating and would therefore tie up a central dictation system for an extended period of

time. If the centralized system is accessed via the telephone, this person is unable to receive incoming calls while dictating. The desktop model would alleviate these problems. Various types of recording media are utilized in desktop models, including reel-to-reel tapes, cassettes, cartridges, disks, or diskettes. After dictation has been recorded, the recording medium must be carried to the word processing center. The work is then distributed to correspondence personnel for transcription.

The final type of input equipment, the portable dictation unit, is generally used by principals who are out of the office and do not have access to an outside central dictation system. The most common recording media for portable dictation machines are cassettes or minicassettes. Again, the recorded dictation must be carried to the word processing center and distributed to center personnel for transcription.

Output equipment may be classed into four basic categories: (1) automatic or power typewriters, (2) stand-alone correspondence and text-editing typewriters, (3) shared-logic systems, and (4) computer ATS text-editing systems. Automatic typewriters, correspondence keyboards, and text-editing typewriters all utilize some type of magnetic media—cards, tapes, discs, cassettes, or cartridges—for document storage and replay. The computerized systems have the capability of accessing a central computer system for storage, transmission, or retrieval of information.

Automatic or Power Typewriters. The major difference between a conventional electric typewriter and an automatic or power typewriter is that the automatic typewriter stores the typing in a built-in memory or on a magnetic medium such as card, tape, or some other recording medium as well as on hard copy. This allows correspondence personnel to easily make revisions and corrections. When revisions or corrections are necessary, the typist keyboards only changes or additions. Unchanged text, already recorded, types out automatically error-free at speeds of 150 to 450 words per minute.

To incorporate the basic unit in word processing —automatic or power typewriters—into the total concept, the automatic equipment is generally tied in directly with a central dictation system in a special work area. Dictators from the various locations can call into the dictation system/area, where there is any number of automatic equipment, depending on the number of people serviced. As the dictation becomes available, the typist simply transcribes the information directly onto the automatic typewriter recording media. There it is stored and updated for future typing or reference.

Stand-Alone Correspondence and Text Editing Typewriters. These contain the logic component allowing the ability to handle major revisions. This equipment is used at the secretarial work station (or in work groups) to produce all the typing done at that station with one person in complete control of the entire typing operation. This person produces mostly correspondence, reports, proposals, form letters, and statistical documents.

Shared Logic Systems. This type of system is generally used where there are many lengthy, heavily revised documents which need several revision cycles before they become final documents. A minicomputer handles two to ten terminals (keyboards) which are wired and can be located in different areas. One or more printers may be used.

Computer/ATS Text Editing Systems. These systems share a large computer to produce lengthy, heavily revised documents. The revisions are made on terminals.

Options available on word processing equipment consist of: (1) communications ability, (2) photocomposition compatability, (3) data processing compatability, (4) customer requests for special needs, i.e., "calculating" or "order entry."

Other equipment used in a word processing system includes: (1) Reproduction equipment, such as copiers and duplicators; (2) Filing equipment, including vertical and horizontal files, microfilm and microfiche systems; (3) Communication/Distribution equipment, such as teletypewriters, telecopiers.

The two types of equipment most essential to word processing are dictating machines and editing typewriters because the core of word processing is communicating or distributing the information from the originator to the recipient (sometimes not on paper). (Cecil, 1976)

Five Phases of Word Processing

The five basic phases of origination, production, reproduction, filing, and communication/distribution usually occur when an idea is processed from its beginning to its final destination. (Cecil, 1976)

Origination. All office documents begin in one of three ways: longhand, shorthand, or machine dictation. Longhand is the simplest but slowest form of origination; but it is still the most frequently used method because it is easy, convenient, and revision can be done during origination. Advantages of shorthand include the speed of origination, the convenience of having the shorthand read back during origination for revising and polishing, and the transcriptionist's professional skill which allows the dictator to expect superior-quality output. Disadvantages of shorthand origination are that there is duplication of effort involved, the origination rate is cut in half, and the originator can dictate only when the secretary is available. Machine dictation is both convenient and fast. The author can dictate at a normal speaking rate, and the transcriptionist can adjust the speed of dictation. The originator is able to dictate whenever or wherever desired, as the secretary does not have to be available. The dictator can listen to the dictation and edit it, and the cost is lower per unit of work than it is for other methods of origination.

Production/Typing. The second phase involves the putting of words into their final format by typing or printing. This phase consists of three basic steps: (1) "getting ready" to do a task; (2) "doing" or typing the document; and (3) "putting away" tools and supplies used. The following types of decisions while typing may slow down the typist's speed of production: (1) transcription decisions, such as hearing words correctly; (2) line-ending decisions; (3) page-ending decisions; (4) formatting decisions; and (5) decisions on how to handle errors occurring in the middle of a page. If the originator decides to change or revise a typed document, an authorship change is made which may require that the secretary retype the entire document unless an automatic typewriter is used.

DataPro Research Corporation, 1976, presents this comparison of time and costs for different methods of origination and production.

	Dictation Time & Costs			Transcription Times & Costs		
	Longhand	*Shorthand*	*Machine*	*Longhand*	*Shorthand*	*Machine*
Average Speed	15 words/ minute	30 words/ minute	60 words/ minute	15 words/ minute	15 words/ minute	20 words/ minute*
Cost/Word Originator/ Transcriber Total (labor)	0.0111c/ word	0.0077c/ word	0.0028c/ word	0.0043c/ word	0.0043c/ word	0.0033c/ word

	Dictation Time & Costs			Transcription Times & Costs		
	Longhand	*Shorthand*	*Machine*	*Longhand*	*Shorthand*	*Machine*
Average Letter (150 words)	10 min.	5 min.	2½ min.	10 min.	10 min.	7½ min.
Cost/ Letter Originator/ Transcriber Total (labor)	$1.66/ letter	$1.16/ letter	42c/ letter	65c/ letter	65c/ letter	49c/ letter

* May be increased to 30 words/minute using automatic typing equipment.

Reproduction. This word processing phase is generally done by either copying or duplicating. The type of reproduction used for a particular project depends upon (1) quality, (2) quantity, (3) turnaround time, and (4) cost.

Carbon copying is an efficient method of copying, especially when snapout carbon packs are used. It is inexpensive and production time is saved because there are no additional steps needed for copying. However, the quality is poor, over six copies can be difficult to read, it takes extra time to assemble the carbons with paper, and each error must be corrected on all copies. Copying by automatic typing is done by repetitive playout from an automatic typewriter. The material to be copied is stored on the typewriter, and the machine will produce as many original copies as desired automatically.

The office copier is generally located near the point of need and is mainly used in the low-volume copying range. The copier/duplicator is generally used for over ten copies of an original. It is easy to operate and provides high-quality copies in a short time. The three types of traditional duplicators—spirit or ditto, stencil, and offset—require setup and warmup time and mid-run adjustment, some skill and experience in usage, and cleanup after usage. Spirit and stencil processes involve low cost equipment, and offset provides the finest quality in a traditional duplicator.

Filing. This phase of word processing is receiving more attention in offices today due to the great increase in and importance of office records. Filing is traditionally done in some kind of filing cabinet, either vertical or horizontal, which is conveniently placed for quick access. The type of filing cabinet system used is determined by a number of factors, such as size and type of company, records retained, etc. Many offices also consider the office "landscaping" when selecting filing equipment. Many firms are using microfilm or microfiche for storing their records, especially lengthy documents, to save space and money.

Communication/Distribution. The final phase of communicating or distributing the document to the recipient is generally the simplest. Three internal distribution systems are: (1) one person deposits a document on someone else's desk, which is the simplest method; (2) an internal mail messenger

The Office (February, 1976) presented this comparison of costs for a single document:

COMPARISON OF COSTS FOR A SINGLE DOCUMENT (250-Word Letter)	TRADITIONAL SECRETARY			WORD PROCESSING					
								350 wpm Playout	
	Dictation to Secretary	Longhand	Dictation to Machine	Text Editor and Longhand	Text Editor and Centralized Machine Dictation	Longhand and Lift-off Feature	Machine Dictation and Lift-off Feature	CRT and Longhand	CRT and Machine Dictation
ORIGINATOR (time in minutes)									
Preparation	15	15	15	15	15	15	15	15	15
Dictation	10	17	5	17	5	17	5	17	5
SECRETARY (time in minutes)									
Shorthand	10								
Transcription: Recording	63	53	33	11	6:27	11	6:27	11	6:27
Playback	0	0	0	3	3	0	0	0:43	0:43
TOTAL MINUTES	98	85	53	46	29:27	43	26:27	43:43	26:70
Times Labor Cost per minute (see Fig. 2)*	160 (orig) 057 (secy)								
TOTAL LABOR COST	$8.16	$8.14	$5.08	$5.92	$3.74	$5.75	$3.57	$5.80	$3.60
MATERIAL COST									
Draft Paper	0038	0038	0038	0038	0038	0038	0038	0	0
Final Copy	0049	0049	0049	0049	0049	0049	0049	0049	0049
Recording Media:									
Dictation			01		01		01		01
Transcription**				0099	0099	0099	0099	005	005
Machine Cost***	06	06	06	3409	3409	3709	3709	6818	6818
Steno Pad	005								
TOTAL MATERIAL COST	0737	0687	0787	3595	3695	3895	3995	6917	7017
GRAND TOTALS	$8.23	$8.21	$5.16	$6.28	$4.11	$6.14 –	$3.97	$6.49	$4.30

FIG. 1

*This example uses a $20,000-a-year originator and a $7200-a-year secretary. See Fig. 2 for other salary rates.
**Based on a $300-per-month text editor and a $600-per-month CRT system with 1000 lines-per-day production, including ribbons where applicable.
***$700 typewriter, with ten-year life, used 240 working days a year for ten letters per day, including ribbon.

picks up mail in "out" boxes on secretaries' desks and deposits it in "in" boxes; and (3) an "outside" company mail messenger picks up and distributes mail.

The most commonly used external distribution system is the U. S. Postal Service. One improved method of communication/distribution is the teletypewriter, a typewriter keyboard unit that receives and transmits information via telephone or telegraph lines. It also produces a written record of the message. The magnetic media typewriter with a "communications option" may also communicate through phone lines with another magnetic media typewriter or to a computer. The main advantage of both units is that they transmit a message between two points almost instantaneously.

The facsimile, or telecopier, transmits an exact copy of the original document via telephone lines in four or fewer minutes. This includes photographs and drawings.

When Word Processing Typewriters Are Needed

Obviously, volume of work is the first criterion. Other applications are:

Single Entry Typing (one-time keyboarding): Typist inputs a copy at rough-draft speed, correcting typographical errors as they are detected. Error-free copy is played back from the medium at the full speed of the automatic typewriter. If any typos are caught during proofreading prior to playout, they are corrected by stopping playback and making the necessary insertions and deletions.

Examples of Single Entry Typing:

- Transcription typing
- Any one-time letter
- Difficult or correction-free forms (legal and insurance)
- Any very difficult typing job where revisions are light or non-existent
- Final document typing

Partial Retrieval. This includes all editing or revision typing applications where author changes are made. Not all of the document is reused, but any keystrokes not changed by the author are retrieved from tape or card for automatic error-free playback. Only the editing changes are from new typing keystrokes.

Examples of Partial Retrieval Typing:

- Any authorized documents (the more recipients the more revisions)
- Manuals
- Training Guides
- Reports (including statistical)

Briefs
Proposals
Minutes

Multiple Use: This includes all applications where documents, or parts of them, once recorded and revised, are stored for reuse, once or repeatedly.

Examples of Multiple Use (or Playout):
Directories and lists
Contracts and Agreements
Publications
Repetitive letters
Specifications

Data Capture: Refers primarily to computer input. Magnetic typewriter and CRT (cathode-ray tube) units are used for off-line input to computers when there is a requirement for large quantities of alphabetic, error-free material. This also includes input to type-setting machines.

Problems Encountered in Word Processing Implementation

The implementation of word processing concepts is not without its problems. If word processing were ideally introduced as a management concept, few problems would probably occur; unfortunately, there are few ideal situations in the world of business. Word processing is a management concept which must be supported by all levels of management if it is to be successful. The following are problem areas in word processing as identified by Anderson (1976).

A frequent management problem which many organizations experienced in word processing is the failure to provide for major changes by the responsibilities of the executive or administrative secretaries. The concept was introduced only in the word processing centers where the hardware is located making the secretaries operating this equipment often overloaded while the executive or administrative secretaries have time on their hands. They still serve their bosses on a one-to-one basis and are not given additional administrative responsibilities, therefore, not being utilized to good advantage.

Another problem is that little or no training was given management in the utilization of a newly established center. Few training programs existed on the role of the managers and the administrative secretaries working as a team rather than on a one-to-one basis. Training programs existed only to prepare operators of equipment.

Providing backup support for word processing typing in centers or work groups is another problem observed in offices. Expensive equipment might sit idle because word processing personnel had either left or were ill. The centers tend not to make provision for training backup secretaries. If a person is ill or leaves the company, other center secretaries handle additional typing and transcription which creates problems of intense pressure and overtime work.

Another problem frequently experienced by supervisors is that of uneven work flow. A method for making the work flow more evenly from day to day apparently has not yet evolved.

High turnover is another problem often encountered. The reasons for the high turnover rate include: the job became boring; desire for a job with better promotional opportunities; they did not like the work.

Still another problem is that of poor typing skills. Typing requirements vary considerably with different types of businesses. In some cases, "hunt and peck" typists are hired to perform work involving filling in forms. Persons with a typing skill of 40 words a minute or less have not developed a rapport with their machine; they do not utilize it efficiently, and frequently do not understand many of the operations the equipment is capable of performing.

It is possible to produce beautiful copy with word processing equipment. But such high quality is only possible if the word processing center secretaries are excellent in spelling, proofreading, and typing usage skills. The best equipment available today cannot correct misspelling, inaccurate proofreading, page placement of letters, or incorrect typing usage applications.

A common complaint of word processing supervisors is the poor spelling and proofreading of their center secretaries. This makes it necessary to double-check every document before it leaves the center which does not provide for the best utilization of the supervisor's time. "The quality of the copy can be no better than the quality of the word processing secretary—a point rarely mentioned by the equipment manufacturers and a point often overlooked by management."

How Organizations with Word Processing Solve Problems

The following identifies solutions that organizations with word processing have found for problems that have been encountered:

Problem: Changing to Word Processing System —Implementation

Solutions:
(1) The change was introduced by top management in written form (by organization memo and announcement) and in group meetings with department heads, staff, and employees.
(2) Job opening announcements were made; personnel were offered opportunities to select whether they wanted correspondence jobs or administrative jobs or to work in departments where both types of tasks were done by the same person.

Organizations have promoted from within and have stressed the growth opportunities available through word processing.

(3) Training courses on word processing have been suggested and offered inside and outside organizations.

(4) When decisions needed to be made, employees were involved in the process.

(5) Employees were informed of the benefits the organization anticipated as a result of implementing word processing.

Problem: Administrative Secretaries Lack Job Enrichment

Solutions:

(1) Administrative secretaries have been offered the opportunity to take on tasks currently being handled by managers, such as dictation, answering routine correspondence, and doing research.

(2) Many organizations offer internal training programs where employees can take training seminars to improve their skills in areas such as: records management, origination and dictation of documents, making decisions, improving oral and written communications, developing management techniques.

(3) Word processing production techniques are used to improve the job: cross-training in assigned kinds of tasks handled in administrative areas and cross-training by subject matter, such as in legal offices where specialties in litigation, real estate, probate, etc., are learned.

Problem: Supervisor's Lack of Training

Solutions:

(1) Supervisors are sent to training classes in vendor schools, colleges, seminars, private and business schools.

(2) Outside consultants are brought into the organization to teach internal management training programs.

(3) Management must support persons promoted internally, giving them the authority and accountability to handle the job so they have confidence in making decisions and in directing others.

Problem: Backup Support

Solutions:

(1) Personnel are cross-trained in tasks and specialties within the departments. An example in the medical field in which a person who specialized in radiology prior to implementing word processing is now a word processing secretary in the medical transcription area where work is handled for other departments such as pathology, pediatrics, neurology, surgery, etc. As the system develops, gradually more personnel are cross-trained to handle other work. Personnel find the work much more interesting and challenging, thus helping solve the absenteeism problem.

(2) Many organizations have personnel available for call in to take up the job of someone absent. Many temporary agencies also have word processing personnel available for call in work.

(3) The scheduling of shifts make the work distribution and turnaround cycle work smoothly and efficiently. Organizations now have at least an additional half shift (four hours) after the regular half day.

Problem: Uneven Work Flow

Solutions:

(1) Work is scheduled and distributed after priority schedules are acquired from the using departments. The schedules should concur with the needs of the users.

(2) Reports are published communicating upcoming peaks and slack times.

(3) "Floater" pools are used for call-in for heavy periods. Vacations are scheduled during slow times.

Problem: High Attrition

Solutions:

(1) Appropriate personnel who fit the job and are aware of the nature of the job are selected.

(2) Training is upgraded both internally and externally.

(3) The opportunity and growth potential of positions is communicated extensively.

(4) Supervisors hold training sessions to improve skills such as proofreading, grammar, punctuation, document formatting, vocabulary, spelling, etc.

(5) Upcoming and present job opening, both upward and horizontal, are communicated.

(6) "Suggestion" sessions provide the word processing secretaries the opportunity to share special time-saving ways they accomplish their work—particularly when they have word processing typewriters which have unlimited capabilities.

Problem: Typing Skills

Solutions:

(1) Personnel whose speed is slow, who make too many errors, or who don't see their own errors are encouraged to practice. Companies purchase audio-visual training packages for personnel to use during off hours or during special training clinics.

Problem: Language Arts Skills

Solutions:

(1) The person's present skills are identified immediately. During the job interview, many companies have prospective employees type a letter expressing why they want the job and their own application to determine what that person's present skills are.
(2) Word processing secretaries share the responsibility for proofreading and quality of work. Many organizations make it a part of the job for the secretary to catch their own errors; when that secretary's initials are at the bottom of the document, that secretary has taken responsibility for the quality of the document.

Future of Word Processing

The projections for the next decade indicate the emergence of highly skilled word processing professionals who will demand more and more sophisticated hardware to meet a growing number of applications. Research analysts forecast the application of new technology in word processing, broadening the types of systems offered from the stand-alone systems of today to both stand-alone and shared logic systems in the future. Advances will be made in human engineering, making word processing systems easy to learn and use, and as foolproof as possible. Cathode ray tube (CRT) devices are being added to all levels of word processing systems. The CRT differs from the automatic typewriter in that it allows a typist to "type" text onto a TV screen where the image of the text is displayed. Printing is performed after the text has been created, edited, and verified on the screen.

What heights the total word processing industry will attain in the 1980's and beyond depends on what bounds one puts around the term "word processing industry." With word processing typing equipment already interacting with computers, photocomposers, and telecommunications equipment, the term word processing should already be encompassing the other equipment. (Rosen and Fielden, 1977)

Much of this interaction is an operating reality today. An example is the computer compatible machine shorthand system. As the strokes are made on the machine, each is automatically recorded in digital form on a magnetic tape. The tape is then processed through the computer which prints out the complete transcript ready for editing.

The dictating equipment industry will continue to increase its annual growth rate, with a higher percentage going to centralized systems. This, in turn, will have an effect on office procedures and secretarial requirements with proportionately less use of stenography and greater need for machine transcription, and will eventually see more teaching of machine transcription with standards of achievement equal to those established for shorthand.

The copying and duplicating market will experience a slowdown. Most major office equipment manufacturers will have a plain paper copier in their line, and it will account for a greater percentage of such equipment compared with more sophisticated copiers.

Word processing typing systems overall will stress simplicity. Operators will think of documents, rather than of lines or pages, and document storage and retrieval will become automatic. The word processing supervisor will be supplied with reports on production, turnaround time, individual operator performance, and so on, all generated by the self-monitoring system. (Rosen and Fielden, 1977)

In *Word Processing World* magazine, media authority Paul Doebler assessed future word processing systems, and their effects on organizations, in these terms:

> In our organizations today the handling of information is being separated from other functions, and clearly identified as a distinct area of operations and cost. WP's accomplishment in the area of correspondence and document production has many parallels in other parts of the organization. WP is thus an important piece in a broad new mosaic of information handling and management.
>
> Information and its manipulation—its generation, acquisition, ordering, formatting, communication, storage, and end use for various purposes —had, in fact, become central to the operation of modern organizations. More and more of the organizations' manpower is absorbed in operating these areas. Public relations, advertising, sales promotion, market research, research and development, technical manual publishing, training, production control, engineering, and accounting are among the functions that have grown up primarily to serve informational needs.
>
> In addition, specialized departments have burgeoned to provide administrative support for informational activities. The WP center falls into this category; but it has lots of company—the in-plant reproduction center, mail room, computer center, telecommunications department, forms control unit, art department, systems groups, photography department, photocopy station, telephone switchboard, records storage and retrieval department. . .
>
> It is evident that what is needed is a new integration of the pieces that now exist into a more cohesive, systematic information handling network rather than the development of ever more specialized area of expertise. WP is in the forefront of this integration trend; witness the movement toward photocomposition and the production of documents other than straight correspondence. . .
>
> The future scope for WP will require basic changes in the system as we know it today if it is to realize its possibilities. They will not fall

into the laps of WP people automatically. Also many information handling groups are maneuvering for position and growth. WP seems well situated to become a pivotal group in information handling. It deals with basic forms of information—words—during some of the most crucial stages in the flow from originator to end user.

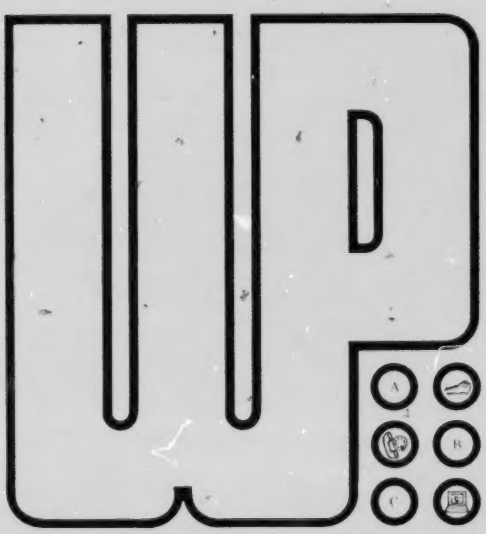
If WP is to realize its potential as part of the developing information handling movement, however, it must grow conceptually beyond the idea of secretarial reorganization . . . WP will have to interface successfully with other elements and groups in information handling, adapting to their principles and practices as well as helping them adapt to WP. WP must accept others as partners, merging individual concepts into a large integrated operation which can accomplish far more for the organization than separate groups.

When this happens, in a sense, offices shall have come full circle. Word processing came upon the scene upsetting solid and comfortable relationships. It reorganized the way executives and secretaries worked together, substituting a more effective and productive system for the tradition they had known. As word processing encompasses other information specialties into its fold, it will continue to shake up solid and comfortable enclaves.

Information is an organization's life blood. It must be processed speedily and cost-effectively. The technology for tomorrow's integrated information system is developing fast. In a way, that is the easy part. The will to grasp it and mold it for management purposes is, as always, the most difficult part.

17

II. Office Careers and Word Processing



PART II

OFFICE CAREERS AND WORD PROCESSING

Although word processing has resulted in a more systematic approach to the management of secretarial support, it is incorrect to assume that word processing is the same in all offices. The different ways in which offices have organized their word processing operations has important implications for the kinds of jobs and career paths available to employees; therefore, organizational differences in offices with word processing are important for teachers and students to consider in their study of these jobs and careers.

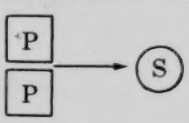
Several factors influence the way in which word processing is organized in an office. The size of the office, the personnel, work loads, the needs of management (including type of work and deadlines), the cost of changing compared to savings created by a new approach, and the structure or traditions of the office. These factors all interact and play a part in determining what the final word processing organization will be.

Ways Word Processing is Organized

The most common ways in which word processing systems are organized are illustrated in the following models:

1 Principal and 1 Secretary

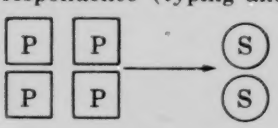
New procedures and possibly equipment are added to the traditional office.



Administrative and Correspondence

2 or more Principals and 1 Secretary

New procedures and equipment are added to the traditional office. Some principals may lose their "private" secretary or principals not previously supported by secretaries are given support. The secretary handles both administrative (non-typing) and correspondence (typing and related) work.

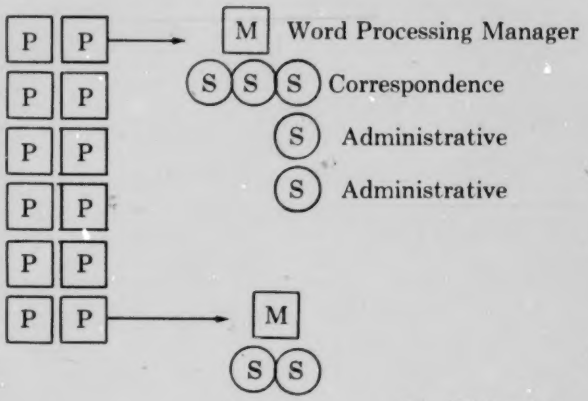


Correspondence

Administrative

A large number of Principals and 2 or more Secretaries

In addition to new procedures and equipment, principals have given up "private" secretaries and secretarial jobs have been specialized.



Administrative Secretarial Manager

All Principals in the Department or Organization and a Group of Managed, Specialized Secretaries.

In addition to new procedures and equipment, "private" secretaries have been eliminated, secretarial jobs have been specialized and are managed by a manager of word processing (correspondence secretaries) and a manager of administrative support (administrative secretaries).

In larger offices, word processing support may be centralized with all corresponding and administrative secretaries in one location, or a decentralized approach may be taken with smaller "satellite" clusters or work groups near the department or principals to be supported.

These decentralized work groups might also be specialized by application as well as department. For example, a multi-national business might have a bilingual department work group. A large law office might have a work group or individual secretary specializing in wills (an application). Sometimes in these instances, several secretaries work as

19

a team and perform both correspondence and administrative duties.

In smaller offices word processing support may be implemented using some of the forms of organization shown above. In fact, many word processing systems are in small offices with only one or two principals. Typically, law offices are the most common small office utilizing a word processing approach to secretarial support.

Degree of Word Processing Implementation

In addition to being organized in a variety of ways, word processing has been implemented to varying degrees in offices. Not all offices with word processing have implemented the total concept of word processing. To implement the total concept of word processing, an office should organize secretarial support after considering the following factors: procedures, reporting relationships of personnel, equipment, the amount and type of work which needs to be done, the cost of existing as well as alternative operations, and developing a managed approach to secretarial support. Many offices base their organization of word processing on some—but not all—of these factors.

One example of a limited implementation of word processing is the "applications" approach. An office utilizing the applications approach would use an automatic typewriter to type originals of certain repetitive material. Secretaries would sit at the machine and produce the needed copy, then return to their desks to continue work. In an office with a large demand for this type of original, repetitive typing, a secretary might be assigned to work at the automatic typewriter all day. In a law office, standard forms such as wills can be produced quickly and accurately on the automatic typewriter, which is often called the "will" machine. In this office, no attempt is made to systematically reorganize secretarial support throughout the office to take advantage of new procedures combined with new equipment.

Organizing word processing around an applications approach may be the most cost-effective way to go in some offices. However, in others, it is at best the first step toward a total word processing system or the result of a half-hearted or poorly planned attempt at changing to a word processing system. Often such attempts have resulted in the creation of "typing pools" with sophisticated equipment but little to offer in fulfilling the promise of word processing career paths.

Work Environments

Another consideration which affects the nature of jobs and careers in word processing offices is work environment. Two factors which have a great impact on environment are the type of work and the level of support which secretaries are expected to handle. Work assigned to secretaries can be classified as either production work or custom/creative work. A comparison of these two types of work follows:*

Production	*Custom/Creative*
—similar work	—diverse work
—predictable workload	—unpredictable workload
—unambiguous input	—ambiguous input
—standardized formats	—formats not standardized
—frequent repetition	—novelty of work
—high storage potential	—low storage potential
—little rush	—much rush
—work is easy to recover	—work is difficult to recover

* Courtesy of IBM

Some offices may be classified as production offices because most of the work is routine and easily produced with a minimum of preparation time and retyping. Other offices have mostly nonroutine work that requires a great deal of rough drafting and retyping because it is creative and not easily produced. Most offices have a combination of these two types of work. It is not unusual for word processing to be applied in areas where the work is production oriented. Little variety may exist and a factory-like productivity is easily developed. This may account for some of the reported dullness in word processing jobs. Today, however, word processing is beginning to be applied in more creative work environments. Word processing jobs and careers require skill in handling both production and custom/creative work.

The level of support which a secretary is expected to supply also affects jobs and careers in word processing. The higher the level of support which is expected, the more challenging the job and the greater the skill of the individual must be. In word processing, the concepts of job enrichment and enlargement can result in changes in what corresponding and administrative secretaries are required to do. The following illustration shows the work performed changes as the level of support increases.

Correspondence Secretary		*Administrative Secretary*
	Higher Level	
Edit—Rewrite	↑	Ask for Additional
Compose—Write	|	Information
Modify—Minor	|	Reduce Number of
Revisions	|	Messages
Decode Ambiguities	|	Seek Information
Detect and Correct	|	Supply Information
Errors	|	Locate Principal
Supply Missing	|	Find Substitute
Information	|	Principal
Translate and/or	↓	Make Sure Message is

20

Substitute	Understood
Transcribe—Voice, hard copy	Take Message as Received
Change as Specified	Deliver Message as Given
Adjust Physical Form	
Copy Type	

Lower Level

Factors which influence the level of support which is expected include: the skill of the secretary, the expectations of the principal, the ability of the principal to delegate, the nature of the work, and the expectations of the secretary. Enriched and enlarged jobs in word processing require secretaries to have expanded goals, a high degree of skill, and the ability to apply that skill in a variety of situations.

Word Processing Jobs and Career Paths

Word processing has had a direct and an indirect impact on jobs and careers in the office. The most direct impact has been on entry level jobs, particularly that of the clerk or junior typist. The old steno or typing pool has been replaced by a more sophisticated system. This has resulted in some new skill requirements as well as new emphasis on old skill requirements. The most noticeable change has been the splitting of the secretary's position into two specialties: correspondence and administrative. The new skills and knowledges required of these specialties are:*

Correspondence	*Administrative*
—Machine Transcription	—Researching Information
—Mag Media and CRT Keyboards	—Analyzing Data
—Dictation Equipment	—Coordinating Calendars
—Magnetic Media Filing/Logging Systems	—Arranging Travel
—Standard Margins/ Tab Grids	—Originating Correspondence
—Language Skills (English and Bilingual)	—Arranging Meetings
	—Setting Priorities
	—Problem Solving
	—Language Skills (English and Bi-lingual)

* Courtesy of IBM

In many organizations, jobs are designed around subject area specialization rather than around the tasks performed. Thus, specialized skills and knowledges in such areas as legal, marketing, medical, technical, and bilingual office procedures and terminology are required for these specialties. Within these areas, jobs can be specialized around applications. For example, in large legal offices a work group could specialize in corporate law.

Word processing has also created new positions at the supervisory level. As new installations were implemented, career opportunities were created for many secretaries. Furthermore, these supervisory positions provide some opportunities for career path development. Skills and knowledge required of word processing supervisors include:*

Supervisor

—Work Flow Techniques
—Procedures Writing
—Planning and Conducting Training
—Psychology
—Management

* Courtesy of IBM

Secretaries who experience career advancement and must make the transition from secretary to word processing supervisor/manager, find their secretarial background to be both helpful and a hindrance. Of particular importance are the differences in personal qualities required in these two very different positions. These are presented below: (Chambers, 1975)

Secretary		*Manager*
—supportive	vs.	—directive
—subjective	vs.	—objective
—conscientious to detail		—look at the "big picture"
—self-directive, a "doer"	vs.	—good delegator
—responsive	vs.	—decisive

Students preparing for entry level jobs must be made aware of the possible need to make a transition which requires different qualities if a career path is to be pursued via the supervisory route. Moreover, courses aimed at preparing secretaries for supervisory and management positions will need to provide opportunities to experience work situations differently and begin building these qualities.

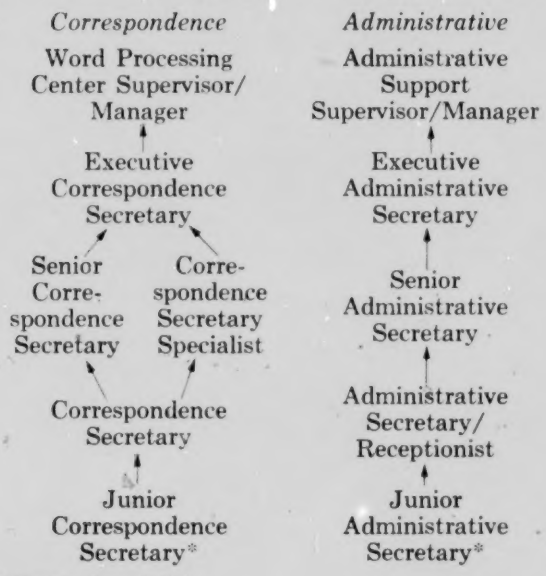
Word processing has had an indirect effect on secretarial jobs and careers in traditional offices which have not adopted word processing. These secretaries may use modern equipment which has developed out of the word processing movement. In non-word processing departments within an organization which has established word processing, secretaries are being relieved of various typing tasks. The word processing center has become a service center for "traditional" secretaries, particularly those on executive row. Word processing has also resulted in an increased awareness of the costs involved in secretarial support. All offices need to cut costs. Secretarial personnel are being hired with cost effectiveness in mind.

In some ways secretaries are competing with word processing. Today, the test is "Is your work cost effective?" The demand is for personnel who not only can type words but who can also manage the process by which they are created. Traditional and word processing offices need secretaries who are "word managers." These effects are more subtle, but they, too, create a need for word processing

knowledge. The impact of word processing on office jobs and careers goes beyond the walls of the Word Processing Center.

In theory, word processing includes established and well-defined career paths for word processing secretaries. The following is a commonly used outline of those career paths:

WORD PROCESSING CAREER PATHS



* Entry-Level Jobs

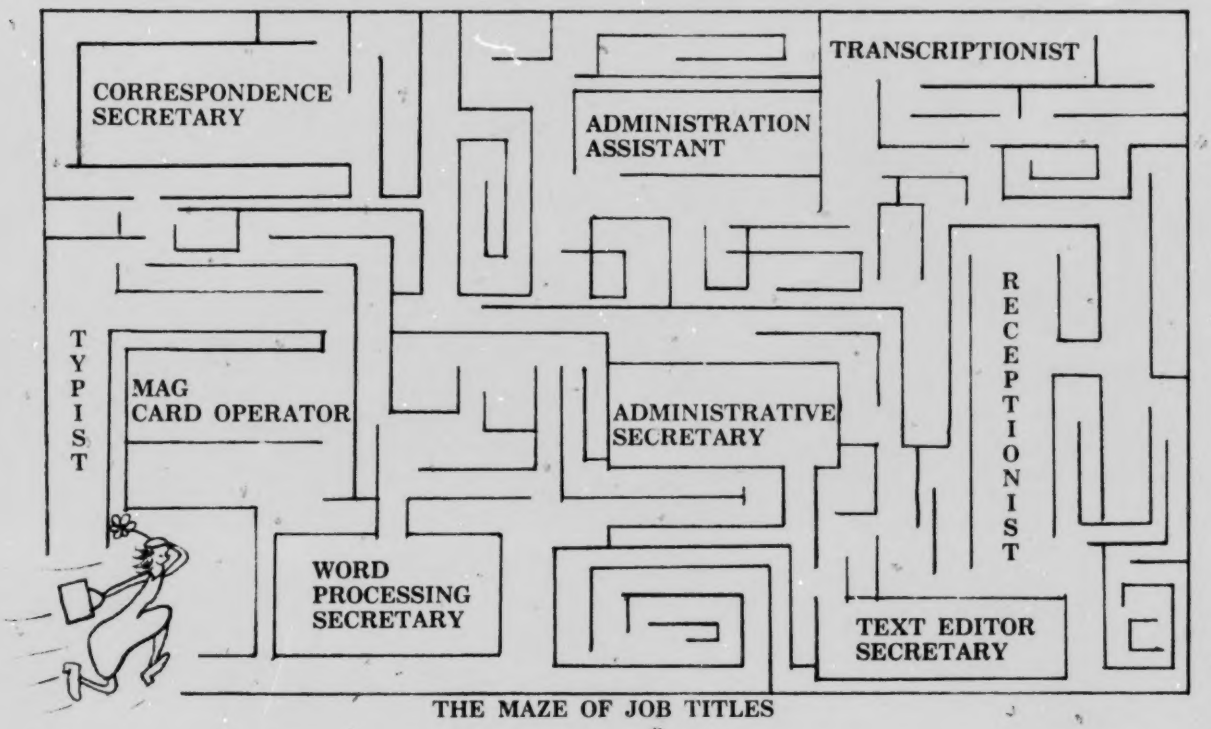
However, in practice the concept of career paths has experienced problems which have limited its impact on secretarial advancement to more challenging, responsible, and well-paying jobs. Many offices have made little progress or shown little enthusiasm for the development of career paths for their secretarial personnel. Total fulfillment of the career path promise is still in the future. Word processing education is a necessary step.

Not all career development involves upward movement in the organization. Horizontal movement can result in rewarding career opportunities in word processing offices. For example, a junior administrative secretary might discover that he/she does not enjoy handling the varied responsibilities of that specialty. This employee could move horizontally to the position of junior corresponding secretary or possibly be promoted horizontally to corresponding secretary.

Cross-training is another possibility in word processing. It can be the result of a career choice as described above or it might be the result of the word processing approach taken by a particular office. Some offices specialize the jobs, but not the people. Word processing secretaries rotate from correspondence to administrative work after a period of weeks or months.

Word processing jobs have both advantages and disadvantages. Some of the advantages given by proponents are:

—the secretary's career is no longer tied to the boss's



THE MAZE OF JOB TITLES

—secretaries are recognized and rewarded for their skills and contributions
—specialization allows secretaries to do what they do best
—well-managed systems result in even workload, no peaks and valleys
—modern equipment and up-to-date methods are used
—career paths are well-defined

Critics of word processing identify disadvantages which affect jobs and careers. These include:

—boredom with repetitious work
—little contact with principals
—secretaries are tied to machines
—little training is provided
—administrative secretaries roles are not well defined/developed
—career paths often do not exist
—loss of status
—pay is not on a par with other secretaries in the organization
—often there is a parallel system: traditional secretarial support for top management and word processing

In spite of problems, word processing jobs and careers are here to stay, and the opportunities they provide will increase. In many organizations, effective systems have been established. Career and job opportunities for secretaries have been expanded. Because word processing is relatively new in the office and because most offices adapted the concept to their particular needs and resources, there are a variety of job titles which are used in place of those presented in the career paths previously outlined.

(See illustration on previous page)

Job Titles Do This:

1. Attract people to the profession.
2. Tell other areas in the company that word processing jobs are different.

Job Titles And Descriptions Are Based On:

1. Difficulty of work.
2. Volume of work.
3. Quality needed in end product.
4. Degree of responsibility a secretary is given.
5. Whether or not the secretary uses equipment.
6. The difficulty of equipment being used.
7. Nature of work. (Bergerud and Gonzales, 1977)

The chart on following page is provided to assist in clarifying the meaning of these varied titles. Note that within each group of titles there is a range of job levels. Often there is a difference in the kind of tasks assigned to various levels. However, the level of support is determined not by what is done (mail, typing, etc.) but by what level of support is required.

The future of word processing will see the concept of career paths become an even greater reality than it is today. Also, in the very near future, new career possibilities and new jobs will evolve which will require further curriculum changes. The increasing use of computers in word processing will result in a greater need for positions such as document originators, editors, and graphics specialists. Training in language skills including the skills of organizing writing and paragraphing, as well as reprographics will be essential. (Robek, 1976)

The editors of *Word Processing World* recently asked, "Who will control the Office of the Future? Data processing people? Word processing people? Other people?" It will depend, in part, on what business educators do with their curriculum!

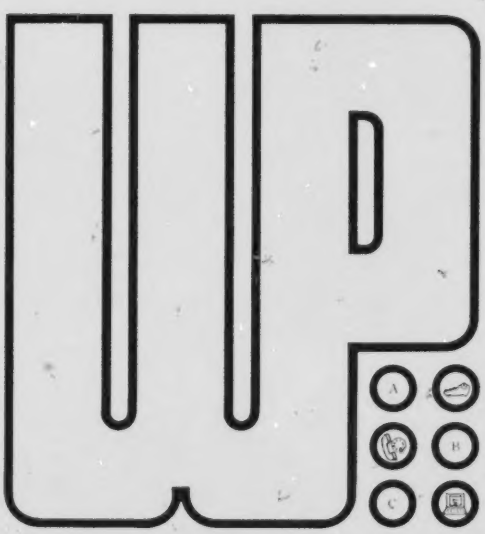
23

WORK FUNCTIONS IN A WORD PROCESSING SYSTEM *

FUNCTION	*OTHER JOB TITLES USED TO MEAN SAME POSITION*	*RESPONSIBILITIES OR TASKS*	*CHARACTERISTICS NEEDED FOR THE JOB*
CORRESPONDENCE (People who operate word processing equipment/have typing responsibilities.)	*Corresponding secretary* Word processing secretary Word processing operator Word processing specialist Word processing coordinator Word processor Operators: Mag Card, MC/ST MT/ST, ATS Typist: Power typist, Word processing typist Transcription specialist Typing correspondence specialist Proofreader Junior correspondence secretary Equipment operator Test editor operator Document Specialist	Type fast Produce error free copy Spell & punctuate accurately Proofread Correct errors Manage time Set work priorities Possibly take dictation Machine transcribe Do high volume of work Do quality work Collate and possibly distribute work	Positive attitude Like to type Analytical/abstract ability Machine oriented Mechanical aptitude Technical ability Ability to understand new equipment/terminology Enjoy working with equipment Able to accept chall./change Conscientious to detail Self-directive, a "doer" Loyalty Ability to handle pressure Confidentiality Accept criticism, flexible Work with interruptions Like teamwork/cooperative
ADMINISTRATIVE (People who have non-typing responsibilities.)	*Administrative Secretary* Administrative specialist Administrative support specialist Word processing secretary Administrative assistant/ secretarial trainee/secretary Receptionist Executive assistant Paraprofessional assistant Letter composer/editor	Handle manager's routine calls/good telephone techniques Oral communications Compose some written communications Produce error free copy Proofread Compose and edit Correct errors Dictation Schedule work Do research Filing Mail handling Photocopy Distribute mail Run errands Statistical calculations Plan itineraries	Good attitude Supportive Conscientious to detail Self-directive, a "doer" Loyalty Ability to handle pressure Confidentiality Accept criticism Work with interruptions Work well with others Ability to understand new equipment/terminology Able to accept challenge Able to accept change
MANAGEMENT (One who directs other people.)	*Manager* Supervisor Coordinator Correspondence coordinator Administrative coordinator Administrative support supervisor Secretarial services administrator Boss Secretarial supervisor Office Manager Manager of correspondence secretaries/services Manager of administrative secretaries/services Management Services Director	Dictation-assign titles, determine retention time storage/distribution Oral communication skills Set priorities on work Coordinate staff efforts Leadership and motivation Planning, controls budget Explore/apply new ideas Employ/train personnel Problem solving Prepare management reports Sell the WP system to the organization Provide flexible/adaptive facility, equipment and system Performance work standards Careful planning of change activity	Good attitude Intelligence Flexible Imagination Likes to work with people Works well under pressure Can meet deadlines Ability to understand new equipment Ability to understand equipment terminology Accepts challenge Accepts/promotes change

* (Bergerud and Gonzales, 1977)

III. Competencies for Word Processing Jobs/Careers



PART III

COMPETENCIES FOR WORD PROCESSING JOBS/CAREERS

A. Concepts, Processes, and Careers in Word Processing

1. Identify differences in characteristics of "social" offices versus offices with word processing.
2. Understand the origins of word processing offices and terminology pertaining to word processing.
3. Evaluate procedures used in word processing offices.
4. Understand the relationship of word processing, data processing, and the total information system of the office.
5. Understand careers and career paths made possible by word processing.

B. Verbal Communications

1. Use appropriate telephone techniques.
2. Efficiently organize and dictate materials for letters, documents, and reports.
3. Use effective oral communications to give clear explanations and directions.

C. Written Communications

1. Compose rough drafts of original documents, including letters, reports, and memos so the message is understood and accepted.
2. Use correct grammar, spelling, punctuation, capitalization, and numerical form.
3. Proofread and edit all material accurately.
4. Compose clear and concise written instructions for use in procedure manuals.

D. Equipment Related Skills

1. Keyboarding
   a. Accurately and rapidly type straight copy and numerical (statistical) copy using machine controls properly.
   b. Accurately arrange and rapidly produce all types of office correspondence and reports.
   c. Neatly correct errors using various means.
   d. Operate automatic keyboards, determining appropriate format with machine coding applicable to format, and mechanically correct errors.
2. Transcribing
   a. Efficiently operate transcribing machine.
   b. Accurately and rapidly keyboard a dictated document while listening to the transcribing machine.
3. Dictating
   a. Efficiently operate dictation equipment.
   b. Dictate material concisely and efficiently.
4. Reprographics
   a. Operate copying equipment efficiently and for appropriate purposes.
   b. Produce quality duplicated copy using various duplicating processes.

E. Planning, Organizing, Decision-Making Skills

1. Determine log/index of documents; utilize and follow up the system effectively.
2. Organize and utilize efficiently a work area filing system.
3. Organize work stations for maximum efficient utilization.
4. Set appropriate priorities on work to be performed.
5. Manage time and tasks efficiently.
6. Accurately interpret materials flow, implement procedures, and recommend changes in systems.
7. Develop an effective system for handling incoming mail.
8. Distribution of correspondence:
   a. Determine the purposes of using copying versus duplicating processes.
   b. Determine purposes for the use of mail versus electronic distribution.
9. Accurately and quickly research information using a variety of sources.
10. Independently analyze data and present it in visual formats.
11. Make travel arrangements correctly and prepare corresponding itineraries.
12. Arrange meetings anticipating all details performing needed tasks, and following through.
13. Logically solve recurring problems as well as isolated ones.
14. Determine and accurately coordinate calendars for a number of principals.

F. Supervision Skills

1. Schedule, supervise, and evaluate typing and clerical functions, maintaining quality control.
2. Coordinate functional activities with other areas.
3. Utilize motivational techniques with employees.
4. Review procedures and implement necessary changes.

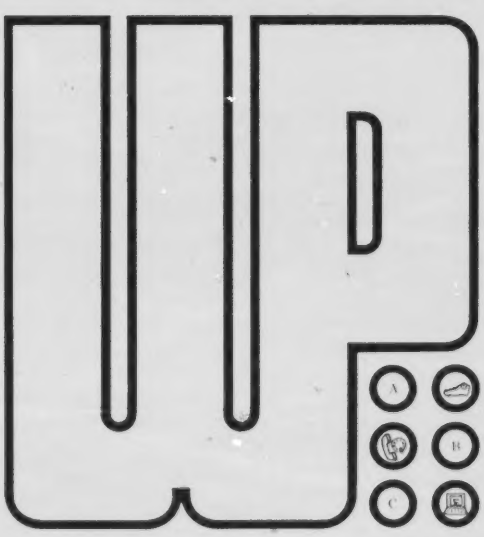
5. Appraise performance and determine salaries.
6. Maintain records on equipment, supplies, and fiscal matters.
7. Organize and implement training plans.
8. Develop and implement plans for work organization and office space untilization.
9. Develop and implement a total record management system.

G. Business Attitudes/Personal Development

1. Develop integrity on confidential matters.
2. Exhibit inter-personal skills that are acceptable in business including:

Attentive listening
Concentration and ability to work with interruptions
Willingness
Coping with pressure
Loyalty
Completing work on schedule
Acceptance of criticism
Good sense of humor
Toleration of routine work
Acting with tact, courtesy, and calmness
Working harmoniously for a common cause

IV. Learning Activities for Developing Word Processing Competencies



PART IV

LEARNING ACTIVITIES FOR DEVELOPING WORD PROCESSING COMPETENCIES

Introduction

The learning activities have been developed to aid students in achieving identified word processing competencies. These activities are arranged according to corresponding competencies. Some are given for a group of competencies since the activities can be used to aid in achieving all the competencies in the group, and others are given for a specific competency only. The learning activities given are merely a sample of the activities that could be used to develop word processing competencies. They are not intended to be the only activities used to develop a given competency.

In selecting the learning activities to use in any class, teachers should assess the students' word processing background and experiences to assure proper sequencing of instruction and to avoid duplication of learning experiences. Students might be asked to respond to such items as:

What does "word processing" mean to you?
Previous typing courses:
Previous office courses:
Have you had any office experience:
What is your reason for taking this course (if specific word processing course)?
What activity would you *most* like to do in this course during the semester?
What is your occupational objective?
State something about yourself (such as special interests or future plans other than occupation).

Prior to implementing any learning activities, it is suggested that the corresponding competency be expanded into a specific performance objective (Appendix F) appropriate for the students in a given class in which word processing instruction is to be implemented.

Competencies and Corresponding Learning Activities

CONCEPTS, PROCESSES, AND CAREERS IN WORD PROCESSING

Competency: All competencies listed under Concepts, Processes, and Careers in Word Processing

Activity: Exercise to compare efficiency of the systems of originating words (input).

Materials: Paper

Instructions: The instructor asks the students to answer the following questions using two procedures:
Procedure 1: Write your answers in longhand.
Procedure 2: Answer the questions orally.
Which procedure for originating words took the longest?
Questions: What is your name? What is your address? What are you wearing? (briefly describe)

Activity: Exercise to compare efficiency of the systems of originating words (input).

Materials: Paper; typewriters.

Instructions: The instructor asks the students to do this exercise with a partner. One of them will act as the author, the other as corresponding secretary.
First, the author should dictate the list of answers to the corresponding secretary. Next, the corresponding secretary should print a neat copy of the dictated answers. Now change the procedures used to process the words in your answers. The partner who is acting as the word originator should take the original set of handwritten answers and give them to the corresponding secretary.
This set of handwritten answers will represent pre-recorded dictation, which would have been dictated and recorded on magnetic tape cassette, belt, disk, or loop or have the same material dictated on any tape and play it back. The corresponding secretary would transcribe the pre-recorded material, which in this exercise is the handwritten copy or taped material. Now, the corresponding secretary should type a neat copy of the answers.
Compare the two procedures—
Which procedure required less of the corresponding secretary's time?
Design input procedures—
Based on your experience in completing these input exercises, which procedures would you recommend to speed up word processing input?

Activity: Exercise to compare efficiency of office output procedures.

Materials: Printed responses used in previous exercise.

Instructions: Take the neatly printed copy from the previous exercise and make the following changes as a secretary would in a traditional office. *YOU MUST CHANGE YOUR NAME SO THAT IT APPEARS IN FILING FORM —LAST NAME FIRST* (i.e., Martinson, Mae). Because this is a major change, you must re-print the entire copy.
Repeat the exercise. But this time you are a corresponding secretary in a word processing office. The set of answers you neatly printed in the input exercise would be recorded on a magnetic card, tape, disk, or in an electronic memory. Let's assume you have recorded this material on a magnetic card. The card would be placed back in the typewriter and the only typing you would do manually would be to advance to the position of your name, delete your name as previously recorded, and retype your name in filing form. Since with a magnetic card typewriter this can be accomplished by typing over your name, SIMPLY PRINT YOUR NAME IN FILE ORDER BY WRITING OVER THE LETTERS IN YOUR NAME AS YOU ORIGINALLY PRINTED IT. By playing out the entire revised card, your answers would be neatly reproduced with your name in file order.

Activity: Complete a course assignment which would normally be done manually on an electric typewriter by using a magnetic keyboard with pre-recorded material.

Materials: Pre-recorded material; magnetic keyboard.

Instructions: Take a course assignment which usually takes from 30 to 50 minutes to complete. For example, a will in legal typing. Prerecord the item so that only a few variables need to be typed in as the document plays out automatically.
Important: Students must have prior instruction of the use of the magnetic keyboard or provisions must be made to assist students. A short lesson on playing out materials would be feasible. However, supervision of students using the magnetic keyboard is recommended in case problems arise.

Activity: Invite a guest speaker from the field of word processing.

Instructions: Ask that person to speak on:

(1) How the office has changed from a social office situation to the word processing organization.
(2) How job duties and titles are defined.
(3) Careers that are available to word precessing personnel. Are there more opportunities for them than for "social" office workers.
(4) Skills and attitudes that are essential for word processing personnel.

Activity: Visit a word processing center.

Instructions: Prepare students for the visit by instructing them to observe such things as:

(1) Equipment used in center
(2) Lay-out of facilities
(3) Arrangement of work areas
(4) Filing systems
(5) Work log
(6) Attitude of personnel

Questions they might ask of the supervisor might involve:

(1) Work flow
(2) Equipment problems
(3) Work distribution
(4) Turnaround time
(5) Personnel matters
(6) Training procedure on specific equipment

If permission is granted, they might ask other personnel questions concerning their career, its advantages and disadvantages.

Activity: Think and Respond Questions for students to complete.

Instructions: Understanding the concepts of word processing involves defining its phases and indicating how those phases interrelate in the total office operations. Typical think and respond questions that might be asked of students follow. They could respond in writing, or the questions could be used for discussions in class. The questions are only samples of all phases of word processing and certainly do not include all content that could be included:

(1) What are some skills and attitudes that office workers should possess?
(2) When you think of originating a document in an office, what come first to your mind? Why?
(3) Is there more or less challenge in the office that has automated equipment? Why? How?
(4) How could you convince others of the value of using dictation equipment for originating documents? How would machine dictation help you or someone else?
(5) What training would an originator or producer need to have in order to learn how to use dictation equipment proficiently?
(6) How does change affect people psychologically? How can change in work situations be made acceptable to office personnel?
(7) If you had to send information from your office to branch offices in other cities, what

option would you want to have on your word processing typewriter?
(8) In determining the kind of copier to lease or purchase, what factors would you consider?
(9) Why is it important for someone in the word processing field to understand filing and filing systems?
(10) How would you determine if your present phone system is satisfactory?
(11) Why would a secretary prefer a traditional office structure?
(12) How would you find job satisfaction if you typed all day for twenty people you never saw? What actions could you take to make this job more interesting?
(13) How would you learn of the problems people are encountering in your organization?
(14) What problem is apt to occur if each secretary in a firm creates forms for their use? What is a solution to such a problem?
(15) If some secretaries complained of overwork while others were idle, what would you do?

(Cecil, 1976)

Activity: Identify work preferences, and through discussion, relate them to the conditions which exist in word processing offices.

Materials: Work preference rating form.

Instructions: Place a checkmark on the dotted line somewhere from 1 to 10 to indicate the degree to which you agree with the statement. One indicates a low agreement, 10 indicates a very high agreement. You may place your checkmark anywhere on the dotted line.

(1) I want to work for one boss who knows me well.
(–) 1.....10 (–)
(2) I want to be appreciated for my contribution to the organization.
(–) 1.....10 (–)
(3) I would like to spend my work day doing the thing(s) I do best.
(–) 1.....10 (–)
(4) I want to work where there is opportunity for advancement.
(–) 1.....10 (–)
(5) I want to work closely with others as part of a team.
(–) 1.....10 (–)
(6) I want to spend most of my day typing and transcribing.
(–) 1.....10 (–)
(7) I want to spend most of my day greeting people, handling phone calls, and coordinating schedules, as well as maintaining the files.
(–) 1.....10 (–)
(8) I want to be paid on the basis of my skill and contribution to the organization.
(–) 1.....10 (–)
(9) I want a job that involves the use of machinery.
(–) 1.....10 (–)
(10) I want a job which requires that I be creative and a critical thinker.
(–) 1.....10 (–)

Activity: Analysis of specific office cases.

Materials: Office cases such as those identified in *Word Processing in the Modern Office* by Paula Cecil or in *Word Processing* by Helen M. McCabe and Estelle L. Popham.
Questions concerning the office cases or arrangements whereby students would discuss the cases in groups.

Instructions: Duplicate the case situations for students to read. These cases should assist the students in learning to:
Identify equipment used by the personnel in the offices.
Follow the workflow in each of the offices.
Label office personnel and describe their jobs, listing both administrative and production tasks.
Describe the structure of each office.
Analyze the efficiency of the individual departments and the entire organization.
Design what is considered to be the most efficient organization, production, reproduction, filing, and communication/distribution system for each organization and the departments within the firm.

Here is an example of the use of a case study as identified in *Word Processing in the Modern Office* by Paula Cecil:

CASE B: HOLMES INSURANCE COMPANY

In this branch office there are 75 employees. Departments and personnel are as follows:
Office Manager: and 1 secretary
Claims Adjusting: manager, 30 adjustors
Claims Processing: supervisor, 2 clerks
Accounting: manager, 3 clerks
Check Writing: supervisor, 2 clerks, 3 typists
Legal: manager, 4 attorneys, 3 secretaries
Sales: manager, 5 field salesmen, 2 secretaries
Typing Center: supervisor, 3 typists
Other Personnel: receptionist, mail messenger, reproduction operator, and 6 other staff and clerical personnel

Equipment in use: Electric typewriters (IBM standard, wide carriage, Selectric I and II, Olympia); central dictation system using plastic belts; individual magnetic tape (Stenorette) desk-top dictation units for each attorney and the office manager; Xerox 2400 copier /duplicator with automatic feeding and collating.

The main floor houses all departments except

the Legal Department. The present central dictation system (over the phone) is available to all originators of work. However, it is used only by the department managers and a few of the claims adjustors due to problems they have had with the equipment (down time) and the inability of many people to dictate proficiently or their unwillingness to dictate. Therefore, almost all of the documents are typed from longhand. Adjustors are on the phone a great deal of the time and write information which is supposed to be typed accurately by the typists. The typists complain because it is difficult to read the handwriting, and they are slowed down considerably in producing the work. There are complaints from the adjustors, too, when their work is backlogged. The office manager feels there are too many people processing checks—that too much time is spent writing down information for checks which must be mailed by noon of each day. Another problem is that the secretaries are overworked, trying to meet strict deadlines and quality requirements; they frequently work late or during lunch hours. Not surprisingly, there is a high rate of turnover, especially among typists.

The Legal Department, which is housed on the second floor, operates independently of the other departments. Originators dictate on Stenorettes (which record on magnetic tape), but they do give some longhand and hard copy input to the secretaries.

Methods of origination are as follows:

Office Manager: Desk-top unit and longhand
Claims Adjusting: Central dictation system over the phone, but most originators use longhand.
Claims Processing: Longhand
Accounting: Longhand
Check Writing: Longhand
Legal: Desk-top units for all attorneys and manager; transcribes for 3 secretaries. Also some longhand and hard copy input.
Sales: Longhand
Typing Center: 3 transcriptionists

Documents produced are:

Office Manager: correspondence, reports, forms
Claims Adjusting: correspondence, reports, forms
Claims Processing: forms, reports
Accounting: correspondence, reports, forms
Check Writing: checks
Legal: correspondence, reports, forms
Sales: correspondence, reports, proposals
Typing Center: correspondence, reports, proposals

List below the origination problems you observe for the departments in Holmes Insurance Company.

Office Manager
Claims Adjusting
Claims Processing
Accounting
Check Writing
Legal
Sales
Typing Center

Answers:

Office Manager: Supervisor doesn't use dictation equipment to save origination time.
Claims Adjusting: Longhand is overused due to difficulties with dictation equipment. This slows down processing of claims.
Claims Processing: Same as in Claims Adjusting.
Accounting: No problems.
Check Writing: Use of longhand is too time consuming and causes interpretation errors.
Legal: Longhand is slow and wastes attorneys' time.
Sales: Longhand is slow and wastes time of originators.
Typing Center: Equipment is often in disrepair. Originators have poor dictation skills. Transcribing longhand is slow and tedious and results in the need for retyping.

CASE B: HOLMES INSURANCE COMPANY

The typewriters used are:
Office Manager: 1 Sel. II
Claims Adjusting: None
Claims Processing: 2 Olympia's
Accounting: 3 std. IBM's
Check Writing: 3 Sel. I's
Legal: 1 Sel. II, 2 Sel. I's
Sales: 2 Sel. II's
Typing Center: 3 std. IBM's
Receptionist: 1 Olympia

Based upon the knowledge you have (the kinds of documents produced, as listed above), briefly state the production problems you observe for the secretaries or typists in each department. (Note: there are no secretaries or typists for the Claims Adjusting, Claims Processing, or Accounting Departments.)

Office Manager (1 secretary)
Check Writing (1 secretary, 3 typists)
Legal (3 secretaries)
Sales (2 secretaries)
Typing Center (3 typists)
Receptionist

Answers:

Office Manager: There are no major production problems in this department since they have a Selectric II for easy correcting.

Claims Processing: No problems.
Accounting: No problems.
Check Writing: Their present typewriters are inefficient—much time is wasted inserting paper and preparing to type.
Legal: There is too much retyping of standard information.
Sales: Production equipment is satisfactory, but secretaries are slowed down typing for high accuracy.
Typing Center: No problems.
Reception: No problems.

CASE B: HOLMES INSURANCE COMPANY

This company has a Xerox 2400 with automatic feeding and collating. The secretaries use carbon paper for correspondence. The reproduction operator makes all copies, which are generally of reports, checks, proposals, some correspondence, and legal documents. The office manager feels carbon paper costs are high and copying costs are excessive. So they no longer copy many documents of over 15 pages, 15 copies per page.

Based upon the information provided, list the problems you observe and how you would improve this reproduction system.

Answers:

Problems:
(1) High carbon paper costs.
(2) Excessive copying costs.
Improvements needed:
(1) Use copysets instead of carbon paper.
(2) Change to a less costly plain paper copier.

CASE B: HOLMES INSURANCE COMPANY

The Typing Center keeps copies of all documents in three vertical files near the typists, but the adjustors also keep copies of correspondence in their desks. Daily correspondence is routed throughout the firm to keep all interested parties up to date The legal secretaries keep records in vertical files which fill up one entire wall. The Claims Processing Department keeps records also, using a charge system. Also, each sales secretary maintains his/her own vertical files.

Based upon the preceding information, list the problems you observe and how you would improve the present filing system in the firm.

Answers:

Problems:
(1) Overfiling.
Improvements needed:
(1) Central files and charge system.

CASE B: HOLMES INSURANCE COMPANY

Outside mail is stamped on a postage meter in the mailroom. Mail to other field offices is handled in bulk and mailed via the U.S. Postal Service. A mail messenger picks up/delivers internal mail at 10 A.M. and 3 P.M. The company has a PBX switchboard which is handled by a receptionist. Phone traffic is very heavy, resulting in many "held" calls and customer complaints. Communication between this office and field offices is very expensive and has deadlines. As a result, sometimes a messenger must take mail by auto to meet deadlines. The phone system problems have become a major concern in this company, mainly because frequently the adjustors cannot get a free line and they miss calls due to long incoming "hold" time.

Based upon the above information, state what improvements should be made in this communication/distribution system.

Answers:

(1) Install a communicating word processing typewriter to efficiently communicate information between this office and field offices.
(2) Update phone system to a Centrex I or II, allowing direct inward dialing. This would prevent phone delays and customer complaints of "held" calls.
(3) Install more outward lines so adjustors can get free lines readily.

CASE B: HOLMES INSURANCE COMPANY

The departmental offices are structured as follows:
Office Manager: 1 principal and 1 secretary
Check Writing: 3 principals (supervisor and 2 clerks) and 3 typists
Legal: 5 principals (manager and 4 attorneys) and 3 secretaries
Sales: 6 principals (manager and 5 salesmen) and 2 secretaries
Typing: 3 typists and a supervisor
The secretaries are generalists, performing both administrative and production tasks with the main emphasis on administrative duties. However, in the Sales Department the secretaries type at least 50 percent of the time. The three typists in the Typing Center are specialists because they do very little other than type correspondence, reports, and proposals. The typists in the Check Writing Department type checks and prepare data for typing of checks, which is a very specialized job.

Based upon the above information briefly state one problem in each area.

Origination
Production
Reproduction

Filing
Communication/Distribution
Office Structure
Office System

Answers:

Origination: Longhand input wastes time of originators and makes transcription slow and tedious.
Production: Retyping revised documents wastes secretarial time.
Reproduction: Carbon copying costs are too high.
Filing: There is overfiling of records and lack of files control.
Communication/Distribution: The phone system is inadequate, and intercompany mailing costs are too high.
Office Structure: Boss/secretary structure is inefficient.
Office System: Some departments need specialization of secretaries.

CASE B: HOLMES INSURANCE COMPANY

Briefly state what systems would be most efficient for the organization, according to the needs and problems of the firm. Designate the most appropriate origination methods and equipment, production equipment, reproduction equipment, filing systems and equipment, communication/distribution equipment, office structure and system, workflow, and procedures.

Origination
Production
Reproduction
Filing
Communication/Distribution

Office structure and system:
Workflow:
Procedures:

Answers:

Origination: Management should install a central dictation system (updated from the previous belt system) with centralization of typing for all departments except the Legal Department, which should have its own central dictation system hooked up to recorders near the secretaries' work stations. Compatible portable units using cassettes or minicassettes should be combined with the endless loop where feasible. If the clerks in Check Writing prepare information for the three typists, they could dictate the information onto a separate dictation system.
Production: A fairly simple word processing typewriter would be most suitable for the Typing Center. It should be a visual screen unit or a memory unit with removable memory for storage of documents (such as proposals) during the editing cycle. The Legal Department will need to store documents, so a visual screen unit with a floppy disc medium might be most appropriate.
Reproduction: Since the typing is going to be centralized in a typing unit and in the Legal Department, the secretaries and typists should change from carbon paper to copysets. Management should determine the best reproduction system to meet their needs; this would probably be a copier without the automatic features.
Filing: To solve the problem of overfiling, there should be one central charge system along with the daily routing system (controlled by a file clerk). The company should consider microphotography, particularly for important historical records.
Communication/Distribution: There is a need for a Centrex II system with direct inward dialing and campon, which would prevent customer delays and complaints. Communication between offices via a communicating word processing typewriter would solve immediate communication needs.
Office Structure and System: Three separate production work groups are needed for Claims, Legal, and Check Writing. In Claims, there should be a central typing unit. The Legal Department should specialize secretaries according to their expertise. For Check Writing, there should be specialization of typing production. Clerks should prepare the data for typing checks, and typists should type them. Clerks should continue to handle administrative and clerical tasks.
Workflow: Origination is directed to the typing centers through the central dictations system. Individual cassette recordings should be hand-delivered by originators or sent through the internal messenger service. Pickup and delivery should be the responsibility of originators (after being notified by phone when work is ready) for urgent documents or through mail service for nonurgent ones.
Procedures/Other: Typing specialists receive their documents through supervisors. The supervisor should delegate work, but the originators should have direct communication with the typists for documents with editing cycles so that a typist has total responsibility for that document, allowing access to information by the originator as to status, etc.

Designate the specific jobs required in the offices of Holmes Insurance Company, and list the tasks and responsibilities for each job.

Answers:

Word Processing Manager: She/he would be

responsible for managing both production and administrative support operations of the company. She/he would report to the office manager and communicate with management and supervisors of production and administrative support.

WP Supervisor: She/he would select, direct and support work groups for Claims, Legal, and Check Writing Departments.

Production Work Group (Claims): There should be a supervisor/coordinator to direct production of all correspondence for this department. Production operators would produce all claims correspondence forms as efficiently as possible.

Production Work Group (Check Writing): Typists would produce all typewritten checks. Processors would prepare all documents for check typing.

Legal Secretaries: These people would handle all administrative support duties for the Legal Department, including phone answering, filing, copying and processing legal documents. They would also type short documents of a confidential nature, but would send all other documents to the Typing Center (Claims work group).

Supervisor of Administrative Support: She/he would have the main responsibility of directing the processing of claims, checks, and legal documents. She/he would report to the WP manager, and communicate with AS personnel relative to improving efficiency of operations. She/he would select, direct, train, and promote AS personnel.

State any equipment, procedures, and/or systems you feel the organization should consider implementing in the future to improve overall operations.

Answers:

Communicating word processing typewriters should be installed in order to transmit information to other offices. They would also be more efficient for processing information. Combining data processing and word processing could improve the claims processing and legal operation, too. Communication should replace keypunch computer input. Micrographics storage should be coordinated with data processing storage, along with storage or documents from word processing.

VERBAL COMMUNICATIONS

Competency: Use appropriate telephone techniques

Activity: Learning team of 3 or 4 students role playing the use of the telephone.

Materials: Tele-training unit (available from telephone company) or access to telephones in school; a tape recorder; telephone usage evaluation forms.

Instructions: Students should be divided into groups of 3 or 4. Each student should participate in two calls. The calls should be recorded on tape. Calls should be played back so that students get feedback as to their telephone techniques and their ability to communicate verbally and to "think on their feet." Learning team members should complete the evaluation forms and give these along with other feedback to the students handling the call.

Preliminary work on "canned conversations" would probably lead up to the conversation situations mentioned below. Video-taping the planned conversations, if equipment is available, would lend another aspect to the instruction.

Word Processing Center Situations:

#1 As a corresponding secretary in the WP Center, it is your responsibility to contact the principal (person who dictated the item you are transcribing) regarding any problems. You cannot understand the first part of the dictation which includes instructions of how many carbon copies are required. Call the principal to clarify this point. (The principal should respond very cooperatively, very pleasantly.)

#2 As an administrative secretary in a word processing office, it is your responsibility to handle all incoming calls. A visitor to your office has lost his way from the interstate highway to your office. He is on the phone and would like directions. (Use your hometown information for this call; i.e., the nearest interstate highway and your school location as the office.) (Visitor on the phone can be a little upset and excited. He is late, tired, and soaking wet—it's raining outside.)

#3 You are the supervisor of a word processing center. It is your responsibility to assign high priority work to the word processing operators and see that deadlines are met. Today two of the operators are out sick. More than the usual number of high priority items have come in to the center this morning. You must call Ms. Whitcomb, one of the vice-presidents, and tell her that her work might not get done today. (Ms. Whitcomb becomes very excited, threatens to call your superior, is talking very fast and loudly.)

Competency: Efficiently organize and dictate, using appropriate equipment, material for letters, documents, and reports

Activity: Individual students dictate one or more

documents after outlining their thoughts based on the original document and/or situation.

Materials: Tape recorder or dictation unit; original documents and/or situation.

Instructions: Student should be directed to read over the original document, develop an outline of the points to be covered in the dictation; material should be dictated; then dictation reviewed and feedback given to student. (Learning teams could supply feedback.)

Word Processing Situations:

#1 As administrative secretary it is occasionally necessary for you to dictate documents. Today you receive a letter from a high school student who plans to become a secretary. Her letter should be answered by you.

#2 As a word processing supervisor, there are times when you must dictate material. Today is one of those times. Yesterday was a rough day in the word processing center. Two word processing operators were out sick and an unusually high number of rush jobs came in. Several principals were upset, including Ms. Whitcomb, one of the vice-presidents. You feel that there might be a need for a backup system for staffing the center when operators are sick and the workload is high. No such system exists at this time. Dictate a memo to your superior, Mr. Carroll, regarding this matter.

Competency: Use effective oral communications to give clear explanations and directions

Activity: Organization of logical steps in direction giving.

Materials: Paper and supplies.

Instructions: The instructor begins by asking students what helps them most when they are given directions by someone else. After discussing this with students, ask them to do these things:

(1) Write the step by step directions to get from where they are to a certain location (all the same one). Go over as a group and determine who explained it most explicitly.

(2) Write the step by step directions on how to do a certain simple task preferably something they have learned to do in the class. Put students in groups of two. Have one student read their directions as the other student performs the step as given. Have them evaluate each other.

(3) This time divide class into larger groups. Give each member a task (somewhat more complex than in #2) to explain. Each should have a different task. They are now to explain it step by step to the group without writing it down first. Have the group members evaluate each other as to the effectiveness of the communication.

WRITTEN COMMUNICATIONS

Competency: Compose rough drafts of original documents, including letters, reports, and memos so the message is understood and accepted

Activity: Weekly progress memos. To be composed, typed, and submitted by individual students each week.

Materials: Typewriters.

Instructions: Students should be directed to type an original and a copy. The memo should include a summary of what they did during the week, how they felt about it, and their plans for the coming week. The summary of progress should refer to the goals set in the previous week's memo. These should be read by the instructor and returned with appropriate comments. Students hand in two copies, instructor keeps one and returns the other after comments have been recorded. This continues throughout the school year.

First month—positive feedback emphasized.
Second month—begin to check grammar, etc.
Third month—sentence structure, etc.

Activity: Composition of memo to employees.

Materials: Typewriter, paper and supplies.

Instructions: The teacher will explain to the students that they are to assume they are supervising 30 employees in an office situation. It has become apparent that the employees are taking advantage of coffee breaks, lunch hours, and their production has gone down gradually over the last several months. The supervisor has decided to try to do something about the situation by writing a memo to all employees (they all follow the pattern) instead of calling a meeting.

The students are to draft a memo that will be motivational to the employees so they will want to be at their stations raising their production rate instead of procrastinating.

The memo composition is to be done entirely at the typewriter.

After the rough draft is completed, they might want a partner to read it for feedback before the final copy is produced.

Activity: Build composing skill beginning with word, phrase, and sentence responses. Finally compose paragraphs and an entire letter. Use composing partners for word, phrase, and sentence responses. Individual students will react to original documents and/or situations for the

paragraphs and letter.

Materials: Original documents/situations and guidesheet of questions for composing partners.

Instructions: Students work with a partner. The guidesheet of questions is used to stimulate responses which the partner must compose and write on paper. (A taped series of questions or the teacher at the front of the room, or a written list could be used to generate the responses. It is important that the responses be written or typed, however.)

Following is a sketch of a unit plan for composition at the machine. It is not intended to be complete but only to serve as a guide to levels of problems and as suggestions for content of compositions. A recommended time limit is given for some of the problems.

(1) Answer in single words:
(45 seconds)
A. List the articles that would normally be found in a desk drawer.
B. List the attributes your male/female must have.
C. Name some major political issues of the day.

(2) Answer by completing the sentence:
(30 seconds)
A. Beards on college boys are . . .
B. What this school needs is . . .
C. I think President Carter should . . .

(3) Answer with a complete, grammatically correct sentence:
(40 seconds)
A. Why is the sky blue most of the time?
B. What is your stand on Referendum 20?
C. Define "Square World."

(4) Write a 3- or 4-sentence paragraph on each of the following topics (give singly):
(2½ minutes)
A. Smoking marijuana.
B. "Easy Rider," "Midnight Cowboy," or "Z."
C. The viewpoint of a newborn kangaroo.

(5) Business Letter:
Compose a letter from XYZ Rug Company to Mr. Albert, dunning him for $367.89 still due on a houseful of wall-to-wall carpeting installed over a year ago. Mr. Albert has paid exactly $20 on account, and the XYZ Company is impatient and ready to turn the account over to a lawyer.

(6) Personal Letter:
A. Compose a letter to Dear Abby asking her advice about something. (You may be serious or comic.)
B. After Letter A has been graded and handed back, have each student pass his/her letter to the student behind him/her. Compose an answer to the letter he/she receives.

(7) Telegram:
Compose a short telegram to The Friendly Food Store from Zeke Arnold. Zeke is sending the shipment of turkeys for Thanksgiving to the store, but it will arrive two days late. Zeke feels compelled to tell the store that he disapproves of eating turkey for Thanksgiving. Make up a reason.

(8) Interoffice Memorandum:
To: Bob Browne, Chairman. From: John Jones. Subject: Excess campaign materials. Date: Current. Browne informs John Jones there is an excess of "Honest Harry for President" posters and buttons reading "Help Harry." He puts forth several suggestions for ridding the Harry Greenstone Party of this overabundance of materials, including papering the study of Harry's new house with the posters as a surprise. Give a few other suggestions, concluding the memo with a rousing statement to awaken Jones' spirit to the upcoming campaign of "Honest Harry for Governor."

Competency: Use correct grammar, spelling, punctuation, capitalization, and numerical form and proofread and edit all material accurately

Activity: 10-minute timed writing from copy with errors.

Materials: 10-minute typing copy; paper; typewriter.

Instructions: Students are to type from 10-minute copy at rough draft speed, but editing material as they go if they catch errors. At end of 10 minutes, have them remove papers, revise copy, and rather than circle errors, pencil in the actual correction. Then type again for 10 minutes, this time from the typed copy which has been revised. Proofread final copy in the typewriter as each page is completed. At end of second 10 minutes, check with the students that material which has been proofread, or give them a corrected copy to evaluate themselves, or have them work in teams to determine their proofreading/editing competency.

Activity: Transcription exercises recorded on media for machine transcription. Individual students transcribe for basic skill practice.

Materials: Pre-recorded material; transcriber; typewriter; paper and supplies.

Instructions: Dictate drills from traditional shorthand textbook material. Require students to transcribe from dictated media. Especially

give practice on:
—fill in the blanks (context meaning)
—similar words
—synonyms
—words pronounced the same but having different meanings
—transcribing phrases

Competency: Proofread and edit all material accurately

Activity: Students in learning teams, compose a report, edit and type it from handwriting, and proofread the final copy.

Materials: Prepared handwritten report; typing paper; typewriters.

Instructions: Students are grouped into learning teams of 2 or 3. Each student is assigned a two-page report on "what word processing means to them." The report is to be handwritten and brought to class. Team members exchange copy and type a rough draft (or final copy) editing the material as they type. It should be proofread by the typist, and then once again by the originator.

Activity: Edit pre-recorded item using magnetic keyboard.

Materials: Pre-recorded item containing errors (p. 41); magnetic keyboard; copy with proofmarks.

Instructions: Individual students are assigned to play out and use an item which has been recorded by a new operator in the center. Operator Wordtangle has made several errors which the students should correct either by:

(1) Revising the original recording.
(2) Revising the copy only. After their initial revisions, they should be given the copy with proofmarks, and further revisions made. Correct copy should then be produced by either method.

Copy to be used containing the proofmarks follows: (on next page)

Activity: Proofreading exercises developed by Ruth I. Anderson, North Texas State University.

Materials: Copy with certain type of errors, i.e., typographical, transpositions, and pileups.

Instructions: Following with background on teaching proofreading as suggested by Ruth I. Anderson in "Proofreading: A Must in Word Processing."

Requirements for Good Proofreading

The teacher should emphasize that certain qualities and skills are essential to good proofreading. It should be stressed that to become proficient, proofreaders must:

Spell correctly
Know basic punctuation rules
Know the correct application of typing usages such as expressing time, amounts of money, use of figures and symbols, etc.
Make simple mathematical calculations
Read for total meaning as well as details
Be error conscious
Know the types of errors commonly missed
Know the places errors frequently occur

Location of Errors

Analysis shows that students tend to miss certain types of errors in their proofreading much more frequently than others. Simple typographical errors are usually found and corrected. However, errors in the titles of manuscript or in the column headings and subheadings of tables are often overlooked completely because the student fails to proofread such material.

Errors in which letters are added or omitted at the end of words are frequently overlooked if the addition or omission does not make the typed word meaningless. For example, the word *you* in the copy may be typed *your* or the word *additional* may be typed *addition*. Since *your* and *addition* are both good dictionary words, the error is not observed. Failure to catch this error or an omitted word indicates that the copy is being read word by word rather than for meaning.

Errors in the middle of a line may be missed even by an expert typist because of the tendency to scan the copy, hesitating at the beginning and end of each line but merely glancing over the line itself.

Errors in format, while not so common as typographical errors, may also be missed because the proofreader is searching only for typing errors and fails to check the format of the copy closely.

Errors in listing or statistical tables are difficult to detect, especially when one is proofreading copy alone. The importance of carefully checking all lists and figures should be stressed. Students should be permitted to proofread this type of copy in pairs. However, they should also be instructed to proofread statistical material from the top down and again from the bottom up if there is no one available to assist with the proofreading task.

Punctuation errors are the most common errors in typed copy. Here the proofreader must not only look for typographical errors but must be alert for incorrectly punctuated copy. Because many people use commas incorrectly, the proofreader must be alert for this type of error.

Errors in grammar do not usually occur with the frequency of most other types of errors, but their very infrequency make the proofreader careless.

Since the typist has been taught proper application of typing usages, the teacher may often wonder why students fail to apply the applications correctly. Amounts of money, time, percent, and the proper expression of figures in copy are all apt to

March 10, 1977

Mr. Joel Armstrong
608 Loop Road
Charlestown, WV 26303

Dear Mr. Armstrong:

We now have in our listings a tract of land which we believe will suit you perfectly. The deed for the land specifies that the tract contains two hundred acres. You have access to the land via state highways 21 and 40 and a private concrete drive. The buildings on the property are in excellent condition and one of the builders told me that the finest materials and workmanship went into them. We believe it is one of the best in the east.

The acreage includes about 40 acres of top-grade timber located in the Jackson County Watershed. There is a large reservoir in which enough water can be stored for a whole summer's irrigation in addition to providing drinking water for livestock and wild life. Another attractive feature is that one of the boundaries is a clear, sparkling stream which abounds in several kinds of fish. The farm is also well equipped with modern labor saving devices and it has a large quota for corn and wheat.

We feel that the land was appraised accurately 2 years ago when 3 of our local banks made loans on it totaling $9,000.00; however, we think you can buy it for less than that now because the owners are eager to sell it as soon as possible.

Can you meet me or one of my agents next Friday afternoon at 2 o'clock so that we can show you this excellent piece of property which we think will sell soon? Might we suggest that you read the book "Buying Now" to assist you in making your decision.

Cordially yours,

CHAPMAN BROTHERS REALTY COMPANY

Harvey Chapman

(Pre-recorded item containing errors)

appear in the copy incorrectly typed.

Probably the most serious type of error is the error in content. Content errors seem to be the most difficult of all to locate. Yet they are one of the most important types of errors and can cause severe repercussions when not detected. A letter inviting a person to speak at a meeting on Tuesday, April 10, may cause all kinds of problems if April 10 is actually on Wednesday. A business school which offers a scholarship of $100 may face a serious problem if the secretary fails to note that she has typed $1,000. Incorrect figures, dates, and other content errors may be overlooked because the typist was not error conscious and alert to their possible existence.

INSTRUCTIONS FOR PROOFREADING PROBLEMS

The following exercises (p. 43) are designed to include various types of errors in situations which might be encountered in a word processing center. In the first exercise only one type of error is included in each problem, beginning with the typographical error, the most easily located error when proofreading.

At the conclusion of this series of problems, it is suggested that the teacher give the students additional proofreading drills as needed with only two or three errors in each problem, the errors being such that the student must proofread carefully to find them.

It should be noted that the directions provide not only for circling errors but also for recording the time required to find these errors. While accuracy is of prime importance, students should be encouraged to proofread rapidly, also. In the word processing center when the copy is being played out at 250 to 450 words a minute, the final proofreading must be rapid as well as accurate.

A series of proofreading exercises should be developed beginning with problems containing simply typographical errors, and gradually increasing in difficulty throughout the series. For example a typical series might include the following:

Obvious typographical errors
Transpositions and pileups
Incorrect word errors (you for our, etc.)
Spelling and typographical errors
Spelling errors
Style errors
Grammar and typing usage errors
All types of errors

A number of these illustrations (with errors indicated) are included here but it should be remembered that this is only a sample and does not include the complete series. The illustrations do not include handwritten letters, but it is recommended that many proofreading exercises should be handwritten copy.

EQUIPMENT RELATED SKILLS

Competency: All competencies listed under Keyboarding

Activity: "Pretend" automatic typewriters, type copy, strikeover errors.

Materials: Copy material; typewriters.

Instructions: In any class in which students are to produce copy with all errors corrected, designate an "Automatic Typewriter—Strikeover" Day. They are to pretend they have automatic typewriters, and on this day strikeovers are legal. On the copy which is to have all errors corrected, tell them to just strikeover the error as they would on an automatic typewriter. Explain then that when the magnetic tape or card was played out, they would have error-free copy (provided *they* found all their errors). They would also be told that the original sheet containing all the strikeovers would never be used.

Activity: Production typing using the minutes per item method of productivity scoring.

Materials: Production typing job; paper and supplies; typewriter; timing tape and player.

Instructions: Assign students a production typing job and have them time themselves to determine how long it took them to complete a particular item. Then have them type the same item or a similar one, trying to type it in less time. Follow procedure for one week at least. Spend time at end of period discussing how they felt they improved their efficiency that day and in what areas, i.e., paper assembly, error correction, machine manipulation, stroking, etc. This procedure can be used to encourage students to improve again their previous scores. Try to document their scores each day, and see if they improve from day to day.

Activity: Comparison of original papers containing errors corrected by various means.

Materials: Gather samples of original documents in which errors have been obviously corrected. Evaluation form for excellent correction, marginal correction, unacceptable correction.

Instructions: The samples of documents could be displayed or routed to students who would evaluate the appearance. Discussion could then follow concerning error correction using automatic typewriters. An additional discussion topic might also be error correction on copy that will be used as photo-ready for reproduction purposes.

Competency: Efficiently operate transcribing ma-

A number of these illustrations (with errors indicated) are included here but it should be remembered that this is only a sample and does not include the complete series. The illustrations do not include handwritten letters, but it is recommended that many proofreading exercises should be handwritten copy.

Sample 1 (Problem 2 in Series)

Typographical errors, transpositions, and pileups.

Directions: Proofread the copy below, circling all errors. Record the number of errors on the blank at the end of each line and the total number of errors in the space indicated. Raise your hand when you have finished.

Do you know how much it costs (towrite) a letter? The postage and the paper are only a small part of the total cost. The (salries) of the secretary and the dictator are the biggest factors in the cost of (writting) a letter. Other (espenses) that must be charged to the letter include carbon, ribbons, erasers, and the use of the typewriter. Then there are overhead costs, such as light, water, heat, and office space. When you add all (thtese) (espenses) to the cost of the postage and the stationery, you will see why letters are so (expensive).

In word processing if you fail to find the (erorrs) in the rough draft of the letter, then these same errors will appear when the letter is played out from the magnetic tape or card, thereby wasting (valuibe) time and (supplys). Take time to proofread accurately. In (hte) long run (itwill) (vase) time, materials, and money.

Total 13

Sample 2 (Problem 3 in Series)

Transpositions, spelling, and typographical errors.

Directions: Proofread the typed copy comparing it with the handwritten copy. Circle all errors, and record the number of errors on the blank at the end of each line and the total number of errors in the space indicated. Raise your hand when you have finished.

When a company is considering (hte) type of equipment to install in (it's) word processing center, those charged with this responsibility should first look at the type of work to be performed in the center. In some centers where managers and salesmen may wish to dictate at home in the evening or on weekends, it is (improtant) to install recording media that can (handling) several hours of dictation without interruption since usually no one will be (monitering) the equipment at these times or be available to change (casette) or belts. If the (compnay) plans to store recorded letters and paragraphs in the center, then automatic (typwriters) which record the typing on cards may be preferable to tapes. If the company needs to have much of the material recorded with justified (riht) margins, (then) (managment) should consider equipment which will automatically justify the right margin without retyping. Until (managment) knows the type of material to be recorded and transcribed in the center, it will be impossible to select wisely the equipment needed.

Total 12

Sample 3 (Problem 4 in Series)

Spelling and word errors.

Directions: Same as Problem 3.

September 16, 1975

Mr. A. L. Jamison
American States Building, Room 116
1542 Commerce (Srteet)
Fort Worth, TX

Dear Mr. (Jameson)

We are (inclosing) a (broshure) on the 1025 Word Processing System about which you inquired in your letter of September 16.

After (you) review of our system, I am sure you will agree that the System 1025 is worthy of consideration for your Word (Procesing) Center. We will be glad to arrange a demonstration of the equipment for you at (you) (convience).

Our representative for your area is Mr. Henry L. Ingram. He will be calling on you next week to (anser) any questions you may have regarding our products and to set up a time for a demonstration of our 1025 (Work) Processing System.

Sincerely

AMERICAN WORD (PROCESSERS)

Herman Shaffer, Sales (Manger)
Southwest Division

ria

Enc.

Total 12

Sample 4 (Problem 6 in Series)

Style Errors

September 22, 1975

(R)uth I. Anderson
Professor of Business Education
(N. T. S. U.)
Denton, (TX) (76201)

Dear Ms. Anderson

Thank you for attending our recent Word Processing Seminar. Responses to the seminar were most interesting. Business people are looking with keen interest for ways to reduce costs and space requirements. As we mentioned in the sessions, we feel that the open landscape concept for the office offers a very tangible means of doing just this.

If additional information is desired or if you have any questions, please feel free to contact our office.

(A)gain, thank you for investing your time with us.

Sincerely(,)

Jake Miller(,)
President

(ria/JM)

P. S. We would be pleased to have you come by to see our word processing work stations. We are open from 9:00(a. m.) to 6 p.m. every day except Sunday.

Total 5

Sample 5 (Problem 7 in Series)

Grammar and Typing Usage Errors

September 18, 1975

Mr. L. M. Thompson
Manager, Word Processing
General Administrative Services
Chicago, (ILL.)

Dear (Dr) Thompson

On May 1(th) I mailed to you a second draft of the material for the handbook on word processing, indicating that I would be more than glad to (come) to Chicago to discuss all the needed change(s) with you at your (convience). I also indicated that I had rushed the revision since it was my understanding that the third and final copy was to be in your hands by June 30(th).

Since I have heard nothing further from you(,) I am somewhat at a loss to know what the status of the first two drafts are. Certainly I am primarily concerned that the material meet your needs and be entirely satisfactory to you, however, it has occurred to me there is a (possib)ility that you did not receive the manuscript.

I realize that every(one) is extremely busy right now, especially at your Chicago headquarters(,) but I would appreciate knowing whether you did receive the manuscript.

Sincerely(,)

John L. Johnson
Professor of Business Administration

ria

Total 12

chine and keyboard dictated document while listening.

Activity: Individual students will transcribe three items utilizing the following procedures:

(1) rough drafting the item, then revising and typing a final copy
(2) preview the item by listening to the dictation before transcribing
(3) transcribe an immediate "first-time-final" copy.

Materials: Three dictated items; transcribing equipment; typewriter; paper and supplies.

Instructions: Review the three procedures with students. Introduce them to the three dictators: "Smooth Sylvia," "Tricky Timothy," and "Disorganized Daniel." The three items are deliberately designed to illustrate situations where it may be necessary to have a variety of transcription procedures. The short item dictated by "Smooth Sylvia" is organized and distinct making it easy to be transcribed "first-time-final." "Tricky Timothy" attempts to do a good job at dictating, but still makes a couple of mistakes, necessitating the listening to all before transcribing any. With "Disorganized Daniel," there is no way to get the transcription completed without first doing a rough draft. Emphasis should be given to the "first-time-final" as the ultimate goal in word processing offices even with dictators such as "Disorganized Daniel."

Competency: Operate copying equipment efficiently and for appropriate purposes

Activity: Role-playing on reproduction costs.

Materials: Copy of the situation that is to be role-played.

Instructions: Students are given the following situation and two are selected to do the role playing:

You work in a small department with four other secretaries. The office manager has strongly indicated the need to keep down the cost of reproduction, requesting that you make carbon copies whenever possible, instead of using the more costly photocopier. You know that one of your co-workers often neglects to make enough carbon copies when something is being typed; later, he/she finds it necessary to make several photocopies. You sense that the office manager has noticed this situation again, and you resolve to speak to your colleague, who is just returning from the copier, with several sheaves of paper.

Activity: Development of attractive photo-ready layouts that could be copied or duplicated.

Materials: Sharp black and white designs or lettering that could be used for layouts.

Instructions: Let students use their creativity in developing a layout announcing a company-wide picnic. Indicate that a simulated situation would be where they might copy enough to get a reaction from four or five of their colleagues —then enough would be duplicated for all employees.

PLANNING, ORGANIZING, AND DECISION-MAKING SKILLS

Competency: All competencies listed under Planning, Organizing, and Decision-Making Skills

Activity: Students individually keep time records of what they do each period. These are then used to develop the weekly progress memos.

Materials: Log sheets.

Instructions: Any type of log sheet is appropriate. The objective is to get students in the habit of documenting their work, and become more time and procedure conscious. For example, a student might discover that every Friday production is down. This might not have been noticed before; some type of action can be taken to improve Friday productivity.

Activity: Photograph work stations.

Materials: Polaroid camera; work stations.

Instructions: After discussion of appropriate arrangement of work stations, take pictures (use Polaroid) of the students' work stations while they are working. Don't announce when picture is to be taken. Display only those pictures that show improvement from previous photo.

Activity: Learning teams will contact various community agencies to arrange for one short and one long trip.

Materials: Access to telephones; an index card outlining the long and short trips.

Instructions: The amount of instruction on making travel arrangements can vary from none to about 15 minutes in which basics are presented (based on any secretarial procedures textbook). Students are then given an index card with a long and a short trip assignment (these trips should originate from the town or city in which your school is located). Additional information such as preferences for mode of travel, time of departure and return, etc., should be given VERBALLY and can be based on the teacher's own personal preference. Students would return within a half-hour with times and other details necessary for the principal/instructor to make a decision as to

whether to make reservations.
This assignment can be expanded into a week-long project in which students plan an itinerary. For example, a team given a long-trip assignment for London might be asked to inform the principal/instructor as to what there is to see and do evenings, etc., and any special things happening this time of year, etc.

Activity: Self-measurement of time on performing non-keyboarding functions.

Materials: Production situation in typewriting would be best.

Instructions: After students have been introduced to methods of efficiency in performing tasks, they are to be instructed to keep a record of how many minutes they spent in actually stroking keys. They should record the amount of time needed to do such items as prepare and assemble supplies, seek reference material, ask a question, set up the machine, determine procedures. A separate column should be used solely for amount of time spent in correcting errors. The items recorded would depend on what is being produced.
The end objective of this activity is for them to calculate the number of minutes they actually spent stroking the keys out of the total amount of time they were working.
Have the students keep these records for three days and determine if they developed more efficient work habits as a result of the activity.

Activity: Researching current office magazines.

Materials: Issues of various office magazines.

Instructions: Instruct the students to assume that their employer has decided to reorganize the word processing center layout to make it more attractive and functional. The students, playing the role of supervisor, are to prepare a bibliography of articles on office landscaping and layout with particular attention to word processing center arrangement. They are to use at least four different periodicals in doing their research.

Activity: Researching information and presenting in visual format.

Materials: Reference materials containing information and statistics on cities nationwide.

Instructions: Students are to be given this simulated activity.
You are an administrative assistant in a company located in Cleveland that is considering opening its first branch office in one of these locations:
San Antonio, Texas
Seattle, Washington
Denver, Colorado
You have been asked to obtain as much information about these cities concerning items such as cost of living, geographical location, climate, etc. This information is to be presented in a visual format that can be used in giving a presentation to the Board of Directors. Narrative information is to be limited to a minimum.

Activity: Calendar coordination.

Materials: Pages of appointment calandars for five days.

Instructions: This activity is to be conducted for five minutes at the beginning of class for one week.
Each student is to be responsible for the calendars of four individuals with simulated names for one week. At the beginning of the class period each day, the teacher orally (forces them to listen to details) tells students activities to be scheduled for their employers. The students should take notes and do the proper calendar arranging for each. At the end of the week, the teacher goes over the marked calendars with the students. Here are some starters to give to students:

(1) A letter from Sam Waite, of St. Louis, requested a 10 A.M. appointment, which was granted by return mail.
(2) Employer scheduled luncheon with H. L. Lord at 12:30.
(3) Arrange a time when all four can get together for a 90-minute meeting.
(4) Telephone call for a 4 P.M. appointment from Marion Slush.
(5) Mr. Waite wrote and wants his appointment rescheduled a week later.
(6) Employer asks for an afternoon block of time to work on a report.

Activity: Word Processing In-baskets (Administrative Secretary/Corresponding Secretary/Word Processing Supervisor).

Materials: Three In-basket Sets.

Instructions: A short lesson on setting priorities and decision making should procede this exercise. Material from the National Secretaries Association's CPS exam program would be a good source to use for Administrative Secretarial purposes (three are suggested here). Students individually or in teams would be required to put items in priority order and include notations on the items or on a planning sheet (example included) which would indicate what action they would take and why. Whether students actually complete the action is up to the instructor.

WORD PROCESSING IN-BASKETS (3 sets)

Item #	*Administrative Secretary*	*Corresponding Secretary*	*WP Supervisor*
1	telephone message to principal A re: 2:30 appointment	confidential item rush item by 9 A.M.	operators out sick item to be checked done by new operator
2	mail item (junk)	item to be checked with principal C who will be in at 3 P.M.	answer questions (2)
3	mail item (dictate answer)	—need supplies: on last ribbon	help with transcription
4	mail item (principal B's attention)	—note from supervisor, mag card missing from file, you checked it out	memo from v-p, complaint
5	memo from principal C re: will be out of office all day		report due on new operator—is she working out?
6	memo from principal C re: trip arrangements		

IN-BASKET SUMMARY (Sample Copy)

Item No.	*Priority*	*Action*	*Reasons*

WORD PROCESSING IN-BASKET

Administrative Secretary

Ander-Sek Word Processing Consultants, Inc.

Directions: You are an administrative secretary at Ander-Sek, Inc. You are responsible for the administrative support of three principals: Mrs. Marc, Mr. Bobbitt, and Ms. Pell, who are word processing consultants.

It is 8:30 Friday morning, April 13. Mrs. Marc will be out of the office all day. You find the six items attached in your in-basket when you arrive. Read through the items, making note of the action necessary. Determine the priority of each item and put them in the order in which you would complete the action related to each of them. On the action summary sheet, list the items in priority order, outline the action necessary for each, and give a brief explanation of the reasons for priority and action listed. Be sure to consider the following factors:

—time, including deadlines, time available
—the importance of the items themselves (and compared to other items)
—the people involved, their position, availability
—your skills and responsibilities
—others who might be of help
—any follow-up activity needed
—your total situation (do not make a final decision on priority of an item until you have reviewed all items)
—Note: often priorities will change during the course of the day when new higher priority items come to your attention

You are now ready to begin. Good luck!

Note: You do not have to actually complete the required action for these items unless your instructor tells you to do so.

Ander-Sek Word Processing Consultants, Inc.
Areas of Major Responsibility and Interest of Consultants:

Mrs. Marc—Word Processing Management, including equipment, procedures, personnel policies.

Mr. Bobbitt—Word Processing Education, including school curriculum, seminars, industry in-service programs.

Ms. Pell—Organizational Development, including changing from a traditional office to word processing, employee orientation, management by objectives, organizational effectiveness surveys.

Item #1

While You Were Out

To Andrea			
Date 4-13		Time 8:00 A	
From Mr. Carrazza			
Of IBM			
Telephone 538-2160			
Telephoned	X	Please Call	
Returned Your Call		Will Call Again	
Came by to See You		Urgent	
Message: Will be a few minutes late for his 2:30 appt with you today. B. Bobbitt			

Item #2

WORD EATERS, INC.

April 3, 197-

Ander-Sek Word Processing Associates, Inc.
Cypress Gardens, Suite 104
Carterville, IL

Dear Word Processor

Our new product will make your word processing cares disappear. Do I have your interest? Let me take a few moments to give you the details.

First, this new product is so very different than anything presently on the word processing market that I can hardly believe it is true. You will, I am sure, feel the same when I demonstrate this new and exciting word processing product to you. What do you need to do?

Just fill out the enclosed card indicating a convenient time and day for me to stop by and reveal this very valuable product to you.

Sincerely

Harold T. Thompson
Sales Representative

Enclosure

sec

Item #3

March 31, 19—

Ander-Sek Word Processing
Associates, Inc.
Cypress Gardens, Suite 104
Carterville, IL

Dear Sir

I am a high school student and am interested in becoming a administrative secertary. I would appreciate any help you can give me in finding out what a adminerstrative secrectary does. What courses should I take in High School to become one.

Thank you for helping me.

Sincerely

Becky McFadden

P.S. My address is: 1490 Meadow Lane
Rockford, IL

Item #4

NEW CITY HIGH SCHOOL

NEW CITY, NEW YORK 10016

April 1, 19—

Ander-Sek Word Processing Associates, Inc.
Cypress Gardens, Suite 104
Carterville, IL

Gentlemen

I recently learned from one of the teachers in my department of the 1976 convention on WORD PROCESSING IN BUSINESS EDUCATION which was held at the Nassau Community College last January.

Last year we moved into a new building and we hope to set up a program in word processing. We have a room of Dictaphone transcribing machines, some IBM memory typewriters, and IBM composer and Selectric typewriters. However, I have not been able to learn of any secretarial school programs where word processing is taught, nor am I familiar with any such courses of study.

The talk which one of your consultants gave at the afternoon workshop, DEVELOPING A WORD PROCESSING CURRICULUM, would probably have answered a great many of my questions on the subject. I would, therefore, greatly appreciate receiving any notes or other material on the subject to assist me in setting up this department. Your kind cooperation will be of great help, and I wish to thank you for whatever you can do.

Sincerely yours,

Lawrence Allen
Assistant Principal

LA:hk

cc: Ms. Vicki Mariani

Item #5

FROM THE DESK OF

ANDREA MARC

4-12-77

A.A.

I will be out of town tomorrow. I'll be in Chicago—staying at the McCormick Inn. Will be back in the office on Monday.

AM

Item #6

4-13-77

A.A.

Please arrange the following trips for me.

① Tomorrow I would like to go to Chicago to meet with Mrs. Andes at noon.

② From Chicago I need to get to Hartford, Conn., by the evening. I plan to spend the holiday with my family.

Thanks,
Irene Pell

WORD PROCESSING IN-BASKET

Correspondence Secretary

Ander-Sek Word Processing Consultants, Inc.

Directions: You are a correspondence secretary at Ander-Sek, Inc. You are responsible for the correspondence needs of three principals: Mrs. Marc, Mr. Bobbitt, and Ms. Pell, who are word processing consultants.

It is 8:30 Friday morning, March 19. Ms. Pell will be in at 3 P.M. You find the five items attached in your in-basket when you arrive.

Read through the items, making note of the action necessary. Determine the priority of each item and put them in the order in which you would complete the action related to each of them. On the action summary sheet, list the items in priority order, outline the action necessary for each, and give a brief explanation of the reasons for priority and action listed. Be sure to consider the following factors:

- —time, including deadlines, time available
- —the importance of the items themselves (and compared to other items)
- —the people involved, their position, availability
- —your skills and responsibilities
- —others who might be of help
- —any follow-up activity needed
- —your total situation (do not make a final decision on priority of an item until you have reviewed all items)
- —Note: often priorities will change during the course of the day when new higher priority items come to your attention

You are now ready to begin. Good luck!

Note: You do not have to actually complete the required action for these items unless your instructor tells you to do so.

Item #1

Teacher: Can be dictated "live," on tape, or given in handwritten form.

Dictated by Ms. Pell CONFIDENTIAL

Current Date

Mr. Jesse Wyman
Association of Sales Representatives
Director of Educational Programs
1540 Connecticut Avenue, N. W.
Washington, DC 20036

Dear Mr. Wyman:

Your recent explanation of the reasons for cancelling your agreement with Ander-Sek Word Processing Consultants, Inc., does not fully answer my questions. A great deal of progress had been made during the months of January and February. We were about to begin the organizational effectiveness survey, when I took over the project from Mr. Bobbitt. That was on March 3. On March 5 we received your letter requesting a termination of our agreement. You indicated that you felt that many individuals in your organization would have difficulty in "relating" to a woman. This has never been a problem in the three years I have been conducting these kinds of surveys. Could it be that I personally did something to shake your confidence in me or our firm? Or, is there another reason for your feelings?

This matter is critically important to me. I have tried unsuccessfully to reach you by phone. I hope this letter will result in a more direct and complete explanation.

Yours very truly,

Irene Pell, Consultant

Item #2 a RUSH item

(Dictated by Bobbitt)

Current Date

Mrs. Andrea M. Featherstone
Business Department
Crab Orchard High School
Monson, Illinois 62909

Dear Mrs. Featherstone

We strongly support your proposal to establish a word processing curriculum at Crab Orchard High School. Many businesses in the Monson area have changed their offices and have systems which use dictation equipment, magnetic keyboards, and a managed approach to secretarial support. The past five years has been a period of rapid change and growth for the concept of word processing. The future is expected to bring even larger numbers of offices into the "world of word processing."

To my knowledge there are at least 25 offices in the Monson area which have word processing installations. These offices employ over 200 office employees. They, I am sure, will welcome the type of training program you propose to initiate.

If I can be of further help, please let me know.

Sincerely

Bradford Bobbitt, Consultant

Item #3

Teacher: Step 1—dictate rough copy to students

To be checked with Ms. Pell when she returns at 3 P.M.

(Current Date)

Ms. Linda Coffey
Austin Business Education Association
102 Eleventh Street
Austin, Texas 78701

Dear Linda

I am looking forward to my visit to Texas. The following biographical information can be used in introducing me.

Education: Received a master's degree in Business Education and a doctorate in Higher Education Administration and Adult Education from Boston University. Have taught for eight years including: community college, for the Air Force, and Holyoke (Mass). Chamber of Commerce.

Other professional experiences: consultant in the areas of

word processing and individualized instruction for IBM, Media Systems Corp., Cuyahoga Community College District, National Secretarial Association, Springfield, Massachusetts Chapter, and the Holyoke Street School.
Dissertation: An Analysis of Continuing Education Needs of Secretarial Personnel in Traditional and Word Processing Offices.
Currently: Supervisor of Secretarial and Office Specialties program in the School of Technical Careers at Southern Illinois University at Carbondale. Co-director of a word processing curriculum development project funded by the Illinois Department of Adult, Vocational, Technical Education.
Presentations: Across the United States and Canada concerning word processing and individualized instruction.

Teacher: Step 2—(make changes) as a result of the 3 o'clock meeting
retype

(Current Date)

Ms. Linda Coffey
Austin Business Education Association
102 Eleventh Street
Austin, Texas 78701

Dear Linda

The following biographical information can be used in introducing me.
Education: Received a master's degree in Business Education and a doctorate in Higher Education Administration and Adult Education from Boston University.
Present Position: Senior Consultant, Ander-Sek Word Processing Consultants, Inc., Carterville, Illinois.
Professional Experiences: Have taught for eight years including: community college, for the Air Force, and Holyoke (Mass.) Chamber of Commerce. Consultant in the areas of word processing and individualized instruction for IBM, Media Systems Corp., Cuyahoga Community College District, National Secretarial Association, Springfield, Massachusetts Chapter, and the Holyoke Street School.
Dissertation: An Analysis of Continuing Education Needs of Secretarial Personnel in Traditional and Word Processing Offices.
Presentations: Spoken to groups across the United States and Canada concerning word processing and individualized instruction.
I am looking forward to my visit to Texas.

Sincerely,

Teacher: Step 3—Final Copy (Ms. Pell indicates that she wants the headings underlined. Students would insert in typewriter to complete.)

(Current Date)

Ms. Linda Coffey
Austin Business Education Association
102 Eleventh Street
Austin, Texas 78701

Dear Linda

The following biographical information can be used in introducing me.
Education: Received a master's degree in Business Education and a doctorate in Higher Education Administration and Adult Education from Boston University.
Present Position: Senior Consultant, Ander-Sek Word Processing Consultants, Inc., Carterville, Illinois.
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Dissertation: An Analysis of Continuing Education Needs of Secretarial Personnel in Traditional and Word Processing Offices.
Presentations: Spoken to groups across the United States and Canada concerning word processing and individualized instruction.
I am looking forward to my visit to Texas.

Sincerely,

Item #4

You notice that you are nearly out of typewriter ribbons.

SUPPLIES REQUISITION

Item No.	Quantity Ordered	Unit of Issue	Item Description	Price	Total

Date _____ Requested by _____

Received by _____ Date _____

Item #5

50M-5 70 Item #5 NATION-WIDE INDUSTRIES, INC. 3414 BRENTWOOD BLVD. ST. LOUIS, MO. 63105 =13897 =7017

HOW TO USE:
SENDER: TYPE OR WRITE IN TRIPLICATE. FORWARD ORIGINAL AND TRIPLICATE. RETAIN DUPLICATE FOR FILE.
REPLIER: TYPE OR WRITE IN "REPLY SECTION" IN DUPLICATE. FORWARD ORIGINAL TO SENDER. RETAIN TRIPLICATE FOR FILE.

SPEEDINOTE
IMMEDIATE REPLY REQUESTED
MFG. BY NATION-WIDE INDUSTRIES, INC., ST. LOUIS, MISSOURI
AREA 314 PHONE 726-5926

1 Original

TO: Corresponding Secretary FROM: Supervisor

SUBJECT: Missing Mag Card

MESSAGE:

Card # 2417 which contained the proposal for Cuyahoga Community College, written by Ms. Bobbitt, is missing. Do you have it?

SIGNED Supervisor DATE 3-19

REPLY:

SIGNED _____ DATE _____

NOTE: SENDER KEEPS THIS COPY FOR HIS FILES

WORD PROCESSING IN-BASKET

Word Processing Supervisor

Ander-Sek Word Processing Consultants, Inc.

Directions: You are the Word Processing Supervisor at Ander-Sek, Inc. You have been a correspondence secretary and were recently promoted. Your work group is responsible for the support of three principals: Mrs. Marc, Mr. Bobbitt, and Ms. Pell, who are word processing consultants.

It is 8:30, Friday morning, May 19. You find the six items attached in your basket when you arrive.

Read through the items, making note of the action necessary. Determine the priority of each item and put them in the order in which you would complete the action related to each of them. On the action summary sheet, list the items in priority order, outline the action necessary for each, and give a brief explanation of the reasons for priority and action listed. Be sure to consider the following factors:

—time, including deadlines, time available
—the importance of the items themselves (and compared to other items)
—the people involved, their position, availability
—your skills and responsibilities
—others who might be of help
—any follow-up activity needed
—your total situation (do not make a final decision on priority of an item until you have reviewed all items)
—Note: often priorities will change during the course of the day when new higher priority items come to your attention

You are now ready to begin. Good luck!

Note: You do not have to actually complete the required action for these items unless your instructor tells you to do so.

Item #1

While You Were Out

To	Supervisor		
Date	5-19	Time	730 A
From	new operator		
Of			
Telephone			
Telephoned	X	Please Call	
Returned Your Call		Will Call Again	
Came by to See You		Urgent	
Message: will not be in today. She is sick again. Asked about no. of sick days allowed new employees I didn't know. REC			

Item #2

May 18, 19--

Mr. Ronald McHugh
McHugh Steel Company
2759 East Michigan Avenue
Gary, IN

Gentlemen

To anster your questions beiefly:

1. Our word processing center has been in operation for 3 years.
2. We have recently expanded the correspondence area, and now have two corresponding secretaries. We are condisering ading a part-time person in this area--possible a high-school student as part of a coop program.
3. We do have a superviser. However, she is a "working" superviser and is the original corresponding secretary.
4. We have one administrative secretary.
5. All of these secretaries have been or are being cross-trained.

If you have farther questions, feel free to call upon me to answer them.

Sincrely,

Brad Bobbitt, Consultant

Item #3A

As you sit at your desk going through your in-basket, one of the corresponding secretaries comes to you and says:

"I can't clearly hear what the dictator is saying at the end of the letter."

What would you say to her?

Item #3B

5⁰⁰ PM

Today was not a good day for me. First, the correcting button would not remove errors from the paper and I just put a new tape on. And then you returned some letters I did just because they didn't have zip codes — the dictators didn't give any!

New Operator

Item #4

(to be dictated "live" or on tape, or given as handwritten copy)

RUSH to be transcribed by Supervisor

(Current Date)

Mr. Carl Johnston, President
Lincolnland Word Processing Association
6598 State Street
Chicago, Illinois 60646

Dear Mr. Johnston

The following is a summary of my expenses encountered in presenting "Supervisors as Teachers."

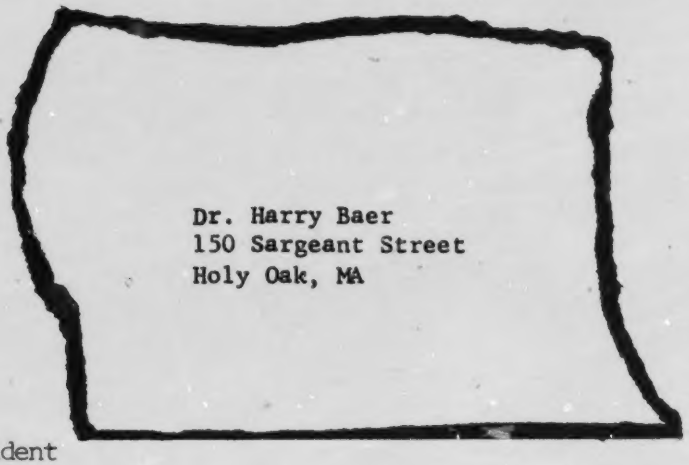
Transportation	$125.00
Consulting Fee	150.00
Hotels and Meals	45.00
TOTAL	$320.00

You should make the check payable to Ander-Sek Word Processing Associates, Inc.

Sincerely

Bradford Bobbitt, Consultant

Item #5



TO: Word Processing Supervisor

FROM: Mrs. Andrea Marc, Vice-President

DATE: May 19, 19--

SUBJECT: SOMEBODY GOOFED!

I just received a short letter from Dr. Harry Baer of Holyoke, Massachusetts. We promised him some information to use in a report he was preparing. He had a tight deadline, we had some excellent information for him, WE DIDN'T GET IT TO HIM IN TIME.

Needless to say he wasn't very happy. He even took the time to enclose the address torn from the envelop to explain how we goofed. That address is attached.

(End of In-Basket Activities)

Item #6

FROM THE DESK OF

ANDREA MARC

Super—

Please submit your report on the new operation to me today. Be sure to cover the following points

① Strengths and weaknesses

② Suggested supervisory action regarding weaknesses

③ Overall recommendation

Activity: Planning a staff conference.

Materials: Instruction and proper stationery and forms needed to complete assignment.

Instructions: The student is to complete the following simulation activity. Assume you are working for the regional sales manager of Daney and Associates located at 747 Third Avenue in New York City. You are administrative assistant to Gail Thomas, regional sales manager. She has given you the responsibility of planning a yearly sales conference to be held at the main office in New York City. Ms. Thomas is out of town and has left you in charge of the office. She will be away the entire week from July 26 to July 30. The following is a list of assignments which must be completed before the conference can take place and some of the normal office work which must also be completed. You are to do these things:

(1) Identify what has to be done and indi-

cate the priority order of those jobs.
(2) Write the required correspondence connected with the conference.
(3) Do all of the assignments connected with the conference.

A. Writing Letter Inviting Participants to Conference
Write a form letter which will be individually typed in the Word Processing Center and sent to tentative conference participants. The conference will be held on Monday, August 23, at 2 P.M. in the Conference Room on the fourth floor at company headquarters. Letters should be in the mail no later than Tuesday, July 27. Participants are:
Gail Thomas, regional sales manager
Barney Helm, vice president in charge of marketing
William Rosten, salesperson
Lyle Duncan, salesperson
Philip DeBussiere, salesperson
Joseph Acamo, salesperson
Linda Merrill, salesperson
Rhoda McEwen, salesperson
Gary Hobbs, salesperson
Joan Patterson, regional advertising manager
Brian MacInnes, assistant to the comptroller
Marie Wellington, recording secretary

B. Participant Record-Keeping
Type 3 by 5 index cards for each conference participant. Include name, address, telephone number, and notation of any special requests, circumstances, or requirements.

C. Writing a Memo
Write an inter-office memo to the facilities officer of your company, Joe Mendez, asking to reserve the Conference Room on fourth floor for the appropriate time. Make three carbon copies.

D. Ordering Supplies
Type a memo to the Supply Room requesting 12 yellow pads and pencils for conference participants. Explain why you want so many, as you have been cautioned to be careful in using office supplies.

E. Filing
Ms. Thomas has mailed back to you several sales reports and other papers that have been gathered on the trip. These should be filed.

F. Ordering Food and Coffee
When you call the company cafeteria to order coffee and pastry for the conference participants, they ask you to write a confirming memo. Write the memo.

G. Obtaining Tickets
When one of the salespersons responds, he asks you to obtain two ballet tickets for him for the evening of Monday, August 23. Assume they are available at City Center, and send a messenger for them. They will cost $15. Take the money for the tickets and the messenger from the petty cash fund, and complete a simulated voucher.

H. Checking for Audio-Visual Equipment
You know that the Personnel Department has an overhead projector. Call that department to see if you would be able to use it for the conference. Check to see if there is a spare lamp in the projector; if not, send a requisition to the Supply Room for one. Personnel Department asks you to send a confirming memo.

SUPERVISION SKILLS

Competency: All competencies listed under Supervision Skills

Activity: Instructing someone on effective dictation procedures.

Materials: Dictating machine or tape recorder; transcribing machine; typewriter.

Instructions: Students will work in pairs. Each pair of students will locate another student in the school (one not enrolled in the course) and ask the student to dictate a letter. The letter will then be transcribed by another member of the class who will comment on the quality of dictation. The pair of students will then give a crash course in dictating to the volunteer dictator. A second letter will be dictated and transcribed by the same class member who transcribed the first time. A comparison will be made.

Activity: Developing a procedures manual.

Materials: Reference sources on office procedures and other material on office procedures.

Instructions: A total class project might be made of this activity, or each student could use it as an individual project.
The product is to be a procedures manual to be used by employers as well as secretarial staff. The following is information that could be used in getting students started in writing procedures for employers:
Before dictation:
Set aside a specific time each day for dictation.
Minimize the possibility of interruptions.
Gather all the information you need before composing the letter to avoid time-wasting paper shuffling or trips to the files during dictation.
Prepare a brief outline of what you want to say, perhaps in the margins of the letter

you're answering, or underscore key points.

During dictation:

Dictate your correspondence in order or priority.

Identify what you are dictating—letter, memo, report, rough draft, or finished product.

Describe mechanical details—single or double spacing, paragraph indentation, underscoring, numbered paragraphs, and so on. Indicate punctuation especially parentheses, colons, quotes, and hyphens.

Give name, title, company name, and complete address of the recipient, unless it appears on incoming correspondence. Spell out names, numbers and technical jargon that could be confusing like Johnson, Johnston; thirty, thirteen.

Speak clearly and take special care to enunciate plurals and past tenses of verbs.

Use action verbs and concrete nouns.

Speak at an even rate, avoiding fast spurts or long pauses, and drop your voice at the end of sentences.

Stick to the essentials; don't ramble.

After dictation:

Give letters to be answered to the secretary in the same order as the replies were dictated.

Carefully proofread the final draft.

Note corrections lightly in pencil on the carbon. An ink mark on the original causes the whole letter to be retyped.

Using dictation equipment:

Know your equipment. Review operating procedures and instruction manual.

Identify yourself if the tape is going to a word processing center. Give name, department, phone number, and so on.

If you have to interrupt your dictation, turn the machine off to avoid wasting tape and ambiguity for the transcriber.

Activity: Interviewing personnel.

Instructions: The student is to assume that the responsibility for hiring a correspondence secretary has been given to him/her as supervisor. The Personnel Department has done initial screening, but the final selection is up to the supervisor. Students are to prepare a checklist of items they will examine in the applicant.

Activity: Plan for employee motivation.

Instructions: The student is to assume he/she is the supervisor of a word processing center which has been experiencing an excellent record of personnel attendance and promptness. The head of the Personnel Department wants to determine the factors contributing to the success of this area because other company departments are experiencing a high rate of employee absenteeism. The supervisor is asked to identify what he/she feels are the factors that have made the word processing center attendance record exemplary.

BUSINESS ATTITUDES/PERSONAL DEVELOPMENT

Competency: All competencies listed under Business Attitudes/Personal Development

Activity: Students engage in conversation (based on a script) while other students are attempting to work.

Materials: Scripts of conversations.

Instructions: Develop scripts of conversations between two or three persons using names and situations from local school. The script should be gossipy in nature. Give script to the two or three students who will be participating on the day prior to activity so they can rehearse it.

On the day of the activity, have about five students begin a typing project that requires a great deal of concentration. After they are well into the project, have the two or three students engage in the gossipy conversation loud enough for the typists to hear.

Following the conversation, discuss with the students who were typing their loss of concentration and how this could be eliminated. Develop different scripts so all students will be able to participate.

Activity: Students are assigned a confidential project. The teacher or student, or a stranger plays the role of "intruder" while the student must maintain the confidentiality of the project.

Materials: Confidential project.

Instructions: Hand out confidential projects (possibly personnel reports) to certain students (maybe 15 out of 30 students).

The instructor is aware of who has the confidential work—but the students and the "intruder" do not. If the teacher plays the part of the "intruder," the projects should be mixed together and handed out anonymously. Students are instructed to complete the project following the directions given with the work. The teacher or "intruder" at various times will visit or linger near the students as they work.

This assignment can be preceded by a 15 minute lesson in what to do to maintain confidentiality, or this presentation can be given in the middle of the exercise or at the end.

Activity: "Lost in the Office"

Materials: List of tasks for "Lost in the Office."

Instructions: This activity was developed by

Jack Hoggatt and Karen Downey at Weber State College in Ogden, Utah. The main purpose is to make people aware of how they affect others and then help them to see how their relationship with others can be improved. A second purpose is to involve the person in the decision-making process. It is possible to coordinate the factor of time management also. Here is the exercise:

LOST IN THE OFFICE?

You are the secretary of a local office located on the 8th floor. It is now eight o'clock on Tuesday morning and you have just walked into the office. The following twenty tasks face you at the start of the day. Your job is to rank them in the order that you will complete them. List number one as the task to be completed first and number twenty as the last task to be completed.

Talk with part-time typist about absences.
Transcribe a tape which contains two short letters of general office dictation from your employer. (All file copies are made with Xerox machine.)
Assist a client who is waiting in your office.
Make the coffee for the office staff.
Answer the telephone.
Prepare payroll checks for the office help.
Update mailing list for use in one week.
Prepare the monthly minutes for tomorrow's board meeting.
Assist a stranger who is waiting in your office.
Make inquiry about purchasing more letterheads.
Open and route a piece of special delivery mail.
Transcribe a letter from shorthand notes which must be in the 9:00 mail collection. (A carbon copy for the file is acceptable.)
Look up research from the public library for a report which your employer needs to have completed in three weeks.
Change the carbon ribbon on your typewriter.
Make Xerox copies of all correspondence. (The Xerox machine is on the first floor.)
Mail the office correspondence for the 9:00 collection. (The mail box is on the first floor.)
Assist a salesman who is waiting in your office.
Mail the office correspondence for the 4:00 collection. (The mail box is on the first floor.)
File yesterday's correspondence.
Make the necessary travel arrangements for your employer's trip to San Francisco.

Activities

Step 1

Have each student in your class rank the 20 office tasks in order of their importance. Caution students to work individually and not ask anyone for help. (Allow approximately 8 minutes for this step.)

Step 2

Divide the class into small groups of five or seven students per group. Have the groups individually rank the 20 office tasks in the order of their importance. All discrepancies must be settled and each group must come to one agreement on the order of the 20 office tasks. (Allow approximately 20 minutes for this step.) Human relations within a group are easily seen here. Be sure to bring out in your discussion how group leaders were formed in each group at this point even though none were appointed.

Step 3

After a discussion has been made by each group, a leader is selected from each group by the teacher. Try to select a variety of personalities for the group leaders. The extrovert as well as the introvert can learn a great deal about themselves and others from being placed in a leadership role.

A. The group leaders are taken to a separate location. (Another room or the hall.)
B. They are instructed to prepare a persuasive defense for their group's decision. Make them feel that their job is really important and that you selected them because you really knew they were capable leaders.
C. At the same time, the groups which remain in the classroom are instructed to do one of the following:
   (1) The group will react in a positive manner to the new leader.
   (2) The group will react in a negative manner to the new leader.
   (3) The group will completely ignore the presence of the new leader.

With these three reactions, you are really forcing the people into the four categories that Dr. Thomas A. Harris describes in his book *I'm OK—You're OK*. When the group reacts in a positive way, they are saying to the group leader I'm OK—You're OK or I'm not OK—You're OK. When the group reacts in a negative way they are saying I'm OK—You're not OK or I'm not OK—You're not OK. If they completely ignore the presence of the new leader, they are also saying I'm OK—You're not OK or I'm not OK—You're not OK. Make sure that in your discussion following the exercise you bring out the I'm OK—You're OK attitudes and the effect it has on people and human relations.

D. The group leaders return and go to a *new* group where they are to persuade the *new* group of their previous group's decision. This should not take more than 3–5 minutes.) Each group will react to the new leader in a positive, negative, or passive manner.

Discussion

This is an exercise in the process of decision making. The teacher should serve as a discussion leader only. He should bring out the following points and have them discussed.

Point 1

Talk with the group leaders about their experience of being accepted, rejected, or ignored.

A. Discuss the group leader's feelings of how the group treated him, and how easy the group was to convince. After talking with the leaders, identify for them if their group was instructed to be positive, negative, or passive. Then ask the group how they perceived the group leader during the time it took to complete step 3. You may also wish to explore the feelings of the group members while they were enacting the situation of their group. Some members will find it impossible to reject, accept, or ignore the group leader.

Point 2

Talk about the first experience the students had when they completed the handout on an *individual* basis:

a. Past experiences
b. Values
c. Priorities
d. Knowledge
e. Education
f. Business ethics
g. Personal feelings
h. Frustrations
i. Time needed for completion of the form
j. Noise level in the room

Point 3

Discuss the first *group* experiences the students had. Bring out the following in the discussion:

a. Role of leaders, followers, and indifferent people
b. Individual ego
c. Previous employment experiences
d. Willingness to compromise
e. Stubborn attitude
f. Time required for completion of decision
g. Noise level of the group
h. Group versus individual decision
i. Group pressure

Activity: Short human-relations activities that can be used with any group.

Instructions:

(1) For one day, try to keep as many of your transactions with other on a complimentary basis as you can. Try particularly to refrain from answering in a flippant manner when someone says something seriously to you. For example, if you are paid a compliment, try to say something helpful to the other person. If someone says, "What good looking slacks," don't say, "They're two years old"; but answer more like this: "How nice of you to notice." Report on the results in class.

(2) Sharing the Positive Approach: See if you can change the behavior of others by giving them positive reinforcement. Think of a relative, friend, or co-worker who does something that bothers you.

(a) Describe in detail the situation you wish to improve.

(b) Formulate in detail your plan to increase praise and decrease criticism.

(c) Keep an accurate record of your actions and the results.

(3) At any point during the week, make a list of the negative statements you made during the day. Try to keep the time of day the same each week. Also, after you have become more proficient, make a list of the negative statements you change to positive ones, and finally a list of the positive statements you make. Try to eliminate the negative habit in a month.

(4) Remembering another individual's name and using it is one of the most effective human relations techniques. Practice this suggestion for remembering names:

(a) When a person is being introduced, be sure that you not only hear the name, but know how it is spelled. If there is doubt in your mind about the spelling, ask the person to spell it; never ask the person who introduced you.

(b) When you have the name, turn your attention to the face. Look at the person and in some way associate the name with the face.

(c) File this association away in your memory, knowing that you will remember that person next time you meet him or her.

(d) Whenever you meet a person, make it a point to address that person by name at the beginning of your conversation.

Report to the class the number of new names you remembered in a month's period.

(5) For one day, casually express appreciation for everything that is done for you. If anyone opens a door, helps you carry anything, passes you the sugar, or is of assistance in any other way, say, "Thank you," and smile. Report to the class whether it made your day any more pleasant.

(6) For a two-week period, keep a record of your moods. Each night before you retire, write down which of the following phrases best described your prevailing mood that day. After the phrases, try to identify what happened during the day to cause that mood to occur:

Very happy
Moderately happy
Neither happy nor depressed
Somewhat depressed
Very depressed

Try to determine at the end of the two-week period your emotional habit patterns and what causes those patterns.

Activity: Case Studies on human relations.

Instructions: Textbooks abound with case studies on human relations. They can be done along

with any type of course work. Constant emphasis on human relations can be accomplished by spending a 30-minute period per week on a human relations case.

Activity:

Materials: Evaluation sheets for controlled observation.

Instructions: According to Popham, et. al, in *A Teaching-Learning System for Business Education*, the most accurate measure of student's affective behavior is via multiple controlled observations.

Before affective competencies can be evaluated, the teacher must structure observation instruments for the behaviors to be observed. This is done with assistance of class members. A desired competency is identified, and students are asked to describe behaviors that must be shown to achieve that competency. For example, the competency "tolerate routine tasks" might be developed into an observation form such as this:

Name of student observed _____

Competency: Tolerate routine tasks by displaying the following behaviors:

		Behavior	
	Dates observed	Acceptable	Needs attention
Works quietly without wasting time visiting with neighbor.			
Does not exhibit frustrations by making verbal protests or complaints.			
Remains calm and attentive to work.			
Consults with others only when necessary to resolve a problem.			
Makes attempt to make work more efficient.			

(Adapted from:
Popham, Schrag, Blockhus, *A Teaching-Learning System for Business Education*, Gregg Division, McGraw-Hill Book Company, 1975.)

Following an observation, teachers should hold a conference with the student so the student is aware of deficiencies and can make conscious efforts to acquire desired behaviors. By using the same forms for multiple observations, the teacher is able to trace the student's progress over a period of time.

Other examples might be:

Evaluation of student's interaction with one other person

Date _____

Name of student observed _____

Competency: Act courteously in all situations with teacher and other students.

	Always	Usually	Seldom
1. Phrases requests for teacher assistance courteously.	_____	_____	_____
2. When asked by another student, give instructions courteously.	_____	_____	_____
3. Requests assistance from other individual students courteously.	_____	_____	_____

(Adapted from:
Popham, Schrag, Blockhus, *A Teaching-Learning System for Business Education*, Gregg Division, McGraw-Hill Book Company, 1975.)

Analyzing an individual's interaction with groups

Participant

Category of interaction _____

1. Expresses support; releases tension. _____
2. Agrees or accepts conclusion. _____
3. Gives information. _____
4. Gives opinion or idea. _____
5. Gives argument or reason. _____
6. Defines or clarifies remark. _____
7. Offers procedural help. _____
8. Asks for procedural help. _____
9. Asks for clarification. _____

10. Answers argument; refutes; criticizes. _____

11. Asks for opinion. _____

12. Asks for information. _____

13. Disagrees; objects; blocks. _____

14. Expresses antagonism, tension. _____

(Adapted from
Popham, Schrag, Blockhus, *A Teaching-Learning System for Business Education*, Gregg Division, McGraw-Hill Book Company, 1975.)

V. Word Processing Curriculum Models

PART V

WORD PROCESSING CURRICULUM MODELS

The development of a word processing program should begin with answers to the following questions:

1. Should we teach word processing?
2. What objectives should be incorporated into our program?
3. How can these objectives be introduced into our curriculum?
4. What equipment and other instructional resources will we require?
5. How much will it cost us to teach word processing?

Each of these questions must be answered by individual schools as they develop and implement a word processing program. This curriculum guide is designed to help teachers and administrators answer these questions. The following facts should be considered along with related data from the community which is served by your school.

First, word processing is real and is here to stay. There is ample evidence of the effect word processing is having on the office. And its effect will increase. Therefore, word processing should be taught.

Second, the objectives of a word processing program should cover more than keyboard training. Some of the major effects of this concept have to do with management techniques, changes in jobs and careers, and new office systems and procedures. Keyboard training alone is not a sufficient word processing education program.

Third, word processing instructional objectives can be added to business or office programs in a variety of ways. There is no one best way. The best approach for a particular school should be based on student and community needs, school resources, and the experience and philosophy of the teachers involved in the implementation of the program.

Fourth, many of the objectives of a word processing education program can be achieved without expensive equipment. When such equipment is available, it can be used in a variety of ways to give students additional skills. When it is not available, word processing can still be taught. There is currently a large amount of commercially produced instructional material available to teachers of word processing. Much of this material is listed in this curriculum guide. However, since word processing is a new and developing concept, it is necessary to supplement commercially available materials with up-to-date information from word processing offices and periodical literature. A list of word processing periodicals, some of which are free to educators, and information on utilizing community resources are included in this guide.

Fifth, the cost of teaching word processing will vary with the objectives included in the program and with the approach taken in implementing these objectives. Schools with limited resources can teach word processing without expensive equipment. However, if a school has the resources or can actively seek resources, there are advantages to providing students with hands-on or simulated experiences.

Word processing is important enough for teachers to develop teaching strategies which circumvent financial and other limitations or to actively seek resources when necessary. Therefore, this guide includes information on alternative approaches to education in word processing and how to seek funding.

The Purpose of Education in Word Processing

The purpose of a word processing program should be to provide students with the broad background necessary for success in the changing office. This purpose requires that more than machine training be included in education for word processing. The following elements should be included in education for word processing:

1. General Knowledge for Office Occupations
   a. Awareness of word processing as it affects career and job opportunities, skills needed, and other changes.
   b. Understanding of word processing concepts related to managed secretarial support, systems approach, and input and output phases.
2. Basic Skills
   a. Communications: verbal and written
   b. Machine Operation: keyboards, transcribing and dictating units, reprographics equipment.
   c. Interpersonal relations: stressing teamwork, interaction with peers, superiors, subordinates, and the customer/client.
3. Attitudes
   a. Work-related
   b. Change-related
4. The Secretary as Word Manager
   a. Cost consciousness (relationship of procedures to cost)
   b. Effective techniques (decision-making aspects)
   c. Self-management (succeeding in and competing with word processing)

The General Knowledge, Basic Skill, and Attitudes elements can easily be translated into competencies and objectives. Specific examples of these can be found in the competency section of this guide. However, the concept of the secretary as

word manager needs to be explained in further detail.

Today, most offices, even those which haven't changed to a word processing approach to secretarial support, are becoming more concerned with cost effectiveness. Students should be aware of this, and they should be able to perform on the job in a way that contributes to the cost effectiveness of the office. Students with this awareness and ability will have an employability advantage, whether they apply for a job and pursue a career in a traditional office or an office with word processing.

All office occupations students need this awareness and ability. For in a very real sense, they are competing with the concept of word processing. Studies of offices have shown that by changing the procedures followed by employees, and without purchasing any new, expensive equipment, great savings are possible. As more office students enter employment with this realization, it will be easier for offices to achieve cost effectiveness; and it will be easier for these students to get jobs and develop careers. Since word processing has helped to develop in the business community a cost consciousness, a concern for using effective techniques, and the taking of a managed approach to secretarial support, office occupations students should understand the relationship between the procedures they use and the cost of office operations. These students should be able to make decisions as to the least costly techniques to use in certain situations. And more importantly, since the majority of secretaries are still working in situations with limited supervision, office occupations students should have experience in self-mangement and should be encouraged to compete with the concept of word processing.

Models for Education in Word Processing

During the development of this curriculum guide, word processing programs of 38 schools in the United States were studied. It was found that there were nearly as many course sequences and titles as there were schools offering them. These programs contained from one to seven courses. In these programs, courses related to word processing typewriting, keyboarding, and magnetic media, had 20 different course titles.

The wide variety of course sequences and course titles is due to the newness of word processing, differences in these schools, and a lack of word processing curriculum guidelines. In the future, there will be a need for more consistency in order to facilitate articulation of what is being taught in word processing. The following course titles are suggested for courses in the subject areas most frequently taught. These suggestions are based on the frequency of use at present and the appropriateness of the title for the content usually taught in a particular subject area.

Subject Area	*Suggested Course Title*
Machine Dictation and Transcription	Machine Transcription (Basic and Advanced)
Typewriting, Keyboarding, and Magnetic Media	Magnetic Keyboarding
Word Processing, Introduction, Concepts, and Skills	Introduction to Word Processing
Word Processing Supervision and Management	Word Processing Management

Examination of the 38 word processing education programs found no common sequence of courses. Furthermore, there was no common order in which skills and concepts were introduced. Approximately the same number of schools began with concepts and proceeded to skill courses as began with skill courses and proceeded to concepts. In most cases if a management course was offered, it came at or near the end of the sequence of courses. In all cases labs, seminars, and work experience came at the end of the sequence of courses.

This curriculum guide will not be an attempt to construct an ideal word processing program model. Instead, three models for teaching word processing will be presented. The appropriateness of these models to a particular school should be determined after the needs and resources of that school are considered.

Before an educational program for word processing is developed, however, the following six issues should also be considered:

1. Should the program prepare specialists or generalists?
2. What should be taught in school, on the job?
3. What should be taught on the secondary, postsecondary levels?
4. What are the specific objectives of machine transcription instruction?
5. What can be done to meet the adult/continuing education need for programs in word processing management and supervision?
6. What can and should be done for special needs learners?

First, as pointed out earlier in the section on word processing jobs and career paths, there is some evidence that the trend toward job specialization in word processing may swing back toward the generalist, or combination administrative/correspondence secretary. This fact should be considered, although most jobs available in word processing today are as correspondence secretarial specialists. Moreover, many office occupations students in secondary and postsecondary programs are not sure of the jobs and careers they will enjoy and pursue. And for students enrolled in a four-year or two-year office occupations program at the secondary or postsecondary level, it is possible to meet objectives for preparation for both specialty areas during the

program, since many of the same skills and objectives apply to both specialties.

Second, some aspects of word processing are better learned on the job. Therefore, office simulation or work experience programs may be necessary. For example, keyboard training may be more effective if emphasis is on the basic operations of recording and playing back, with only familiarity with other more complex tasks. These tasks, which require longer learning time and repeated use for mastery, may be better learned on the job. This approach would allow more students to be trained using fewer machines, without loss of salable skill.

Third, the differences in word processing education on the secondary and post-secondary levels is largely a matter of *how* and *how much*, not of what should be taught. On the secondary level, basic communication skills should be stressed. On the postsecondary level, there may be a need for remedial courses in these areas, but the word processing education program should go beyond an introduction to the concepts of word processing as they affect jobs and careers. The area of management should be a part of the postsecondary program, particularly for adult and continuing education students.

Fourth, machine transcription courses need close attention for several reasons. A wide range of objectives is possible; however, there is not as wide a selection of comprehensive instructional materials available which clearly address these objectives. There is often a lack of employability standards in machine transcription courses. Usually the cost of equipment results in under-equipped programs, and, therefore, a minimum of instruction in this area.

The objectives of this course can include the development of language arts skills, typing skills, decision making, or a combination of these. It is important to consider the background of students when establishing goals and selecting instructional materials. Students with shorthand background usually have better developed language arts skills. Some instructional materials assume a solid typing background—more than typing speed and accuracy. Care must be taken in designing this course.

Standards should be set for machine transcription. Employability, usable copy, and transcription words per minute requirements should be developed. Some teachers have begun to do this (see Bibliography), but more needs to be done.

Although transcribing equipment is expensive, there are ways to provide instruction in this area without having extensive financial resources. Cassette players and teacher dictation at the typewriter can be used to build skills that will transfer to the use of transcription equipment. Individualized instructional packets and open laboratories can be helpful in better utilizing equipment throughout the school day.

Fifth, there is a tremendous unmet need for word processing management education for office personnel. In a study of the continuing education needs of word processing personnel, Kusek (1974) found that one of the most frequently mentioned areas of learning need was the area of management. During the development of this curriculum guide, personnel from industry indicated that this need existed and was growing. Community colleges in particular are in a unique position to provide for this need. Business personnel should be utilized to help develop and teach seminars, workshops, and courses in word processing management.

Sixth, provisions should be made to increase the opportunities for training for students with special needs. A special section of this guide contains information on teaching word processing for special needs students.

Three Alternative Approaches

Word processing programs can be implemented in a variety of ways. The most appropriate model will depend upon the objectives to be achieved, the resources available, and the philosophy of the instructional staff. The following models illustrate three approaches to education for word processing which may be taken.

1. ONE COURSE MODEL
2. INTEGRATED MODEL
3. COMPLETE CURRICULUM MODEL

The ONE COURSE MODEL involves creating a new course which would cover one, a combination of, or all of the following subject areas:

a. Introduction to Word Processing (Concepts and Careers): definition of the concept, the five phases of word processing, types of jobs and skill requirements, career opportunities
b. Machine Transcription (and Related Skills): operation of the transcription machine, language arts review or remedial work, machine transcription techniques: previewing material by listening to the item, rough drafting, and first-time final practice, some production skill development (depending upon background of students)
c. Magnetic Keyboarding: mastery of basic record and playback operations, familiarity with more advanced special operations, application problems
d. Word Processing Simulation: planning and organizing work area and work load, teamwork, decision-making, initiative, time management, interpersonal relations, integration of concepts, transcription skills, and keyboarding. *EMPHASIZE PROCEDURES AND PEOPLE.*
e. Word Processing Management/Supervision: brief introduction to how offices are changed, systems approach, cost control (consciousness), office organization, the future of word processing

The INTEGRATED MODEL involves the utilization of existing courses. Units of instruction related to word processing are introduced into courses in the following areas:

a. Typewriting
b. Transcription
c. Office Procedures
d. Office Management
e. Business Correspondence/ Communications or Speech
f. Cooperative Work Experience

The word processing content which should be integrated into existing office occupations courses is outlined below:

a. Typewriting: rough draft speed in recording documents and accuracy in producing final copy (teaching without automated equipment); emphasis on realistic production speed —include time to plan, set up, type, proofread, and correct document; competency in making corrections with major types of correcting devices (eraser, fluid, tape); introduce modern and efficient styles and procedures; competence on major letter styles (full block, modified block) and familiarity with others such as AMS and official or formal style; emphasize use of judgement, begin verbal response typing (from teacher or taped dictation) early in typing program as a pre-machine transcription skill; include plenty of language arts drills, composition at the typewriter, and typing from handwritten, rough draft, and partially completed copy.
b. Transcription: since most transcription instruction is done in shorthand classes, utilize them for word processing instruction; emphasize efficient procedures, basic language arts drill, including context drills, similar word drills, use of dictionary and other references, making copies, handling enclosures, etc. Develop more than familiarity with transcription machines. If a full course is not offered, students will benefit from special terminology training in legal, medical, etc. rather than completing material similar to that covered in typing classes, i.e., letters, memos, reports. Once students become familiar with equipment and new vocabulary, have them monitor their productivity—how many minutes to produce a document, then repeat in less time. Machine transcription instruction should be expanded as a non-shorthand option, especially in light of the expanded opportunities which exist as a result of word processing. Also, dictation practice could be combined with transcription.
c. Office Procedures: introduce the concept of word processing in a unit covering: definition of the concept, the five phases of word processing, types of jobs and skill requirements, career opportunities. Of the five phases of word processing, three areas are often covered in office practice courses. These are: copying/ duplicating, filing, and communication/distribution (mail and telephone). Whether these are taught as separate courses or as units in office procedures, the following new content should be added: use of automated typewriters as "copying" machines, copy film and other new carbon paper developments, copiers with emphasis on cost and effective decision-making regarding their use—little equipment training is necessary. Introduce the concept of reprographics, emphasizing techniques and teaching basics of graphic display, including layout techniques and requisitioning jobs. In filing, less emphasis should be placed on complex rules which are rarely encountered in most offices. Teach how to set up a work station file, with and without guidelines from a company manual, microfilm, microfiche, computerized records, and special word processing applications. Other topics are: electronic mail, communicating typewriters, and computers. Nearly every aspect of office procedures is affected by the development of computer technology; this technology should be included in the course content of office procedures classes. In-basket materials should be used to develop decision-making, time management, work organization, and teamwork. Role playing and other activities should be incorporated to develop personal interaction skills.
d. Office Management: comparison of traditional offices and offices with word processing, ways in which word processing is organized, how to implement word processing, all phases of word processing: input (dictation, etc.), output typing, etc.), reprographics (copying/duplicating), communication/distribution (telephone and mail), measurement and control techniques, job design, personnel consideration such as job change, people and machine interface, and the future of word processing. This content could be developed into a single unit or integrated throughout the office management course.
e. Business Correspondence/Communications or Speech: emphasize language arts skills, business letter and report writing, verbal communication, use of outlines, use of dictation equipment, drafting and revising important and complex correspondence, originating first-time-final correspondence for routine situations.
f. Cooperative Work Experience: similar content to any coop program. Need to develop contacts and relationships with personnel in offices utilizing word processing.

The COMPLETE CURRICULUM MODEL involves the creation of a series of new courses in the following subject areas:

a. Magnetic Keyboarding
b. Machine Transcription (Basic and Advanced)
c. Administrative Support Services (Office Procedures and Data Processing)
d. Word Processing (Concepts and Careers, Supervision, and Systems and Management)
e. Word Processing Model Office Simulation
f. Word Processing Cooperative Office Experience

These courses would be added to existing courses in English, math, and business subjects to form a total education program.

The following content outlines are suggested for these courses.

MAGNETIC KEYBOARDING:

—introduction to keyboarding as one of the five phases of word processing and brief background on contribution of magnetic keyboarding to the development of word processing.
—basic record, playback, adjust and revision operations (competency level)
—applications, record, playback, adjust, and revise
—special operations (familiarity or competency level depending on goals and time available)
—special applications (only if competency goal is pursued)
—specialty applications: medical, legal, technical, government, etc.

MACHINE TRANSCRIPTION

(Basic and Advanced)
—introduction to machine transcription in word processing
—machine operators (competency level)
—language skills review or remediation: spelling, grammar, punctuation, context
—special techniques: previewing by listening to or rough drafting item, and first-time-final transcription
—specialty forms and terminology: medical, legal, technical, government, etc.
—realistic productivity standards comparable to those established for shorthand transcription courses.

ADMINISTRATIVE SUPPORT SERVICES:

Combine data processing/computer developments and procedures with areas of office procedures:
—telecommunications
—mail systems and procedures
—filing and records management
—reprographics (copying/duplicating)
—work station organization
—time management
—setting priorities
—making decisions
—personal interaction
—teamwork
—research techniques and use of references
—analyzing and reporting data (graphically)
—managing calendars
—arranging travel
—originating correspondence
—arranging meetings
—career planning and job getting

Emphasize people and procedures, rather than equipment.

WORD PROCESSING

The following content may be organized and taught as separate courses or as three modules of a single course.

(Concepts and Careers)
—definition and description of the concept
—the five phases of word processing
—types of jobs and skill requirements
—career opportunities

(Supervision)
—work flow techniques
—procedures writing
—planning and conducting training
—psychology (organizational, worker, change, and training)
—management (decision-making, delegating, directing, expanding frame of reference, budget and finances)
—budgeting

(Systems and Management)
—comparison of traditional offices and offices with word processing
—ways in which word processing is organized
—determining the feasibility of word processing
—how to implement word processing
—the five phases of word processing
—job design/enrichment/enlargement
—personnel considerations (job change, man-machine interaction)
—future of word processing

WORD PROCESSING MODEL OFFICE SIMULATION

Content similar to all simulations. Integrate skills developed in other courses, especially teamwork, decision-making, setting priorities, managing time, and organizing work stations.

Alternatives:
1. Develop a simulation based on the curriculum guide from the state of Minnesota.
2. Adapt simulations such as Lester Hill or Apex.
3. Create a series of in-baskets for use in a mini-simulation.

WORD PROCESSING COOPERATIVE OFFICE EXPERIENCE

Content similar to existing coop programs.

Contacts and relationships with personnel in offices with word processing must be established and maintained.

The competencies and learning activities in other sections of this Guide should be used in implementing the model which best fits the needs and resources of the instructional situation.

Each of the models should be implemented by building upon the resources of existing office occupations programs.

VI. Word Processing for Special Needs Students

PART VI

WORD PROCESSING FOR SPECIAL NEEDS STUDENTS

In recent years education has become increasingly concerned with providing for the needs of special learners. Emphasis on programs for the disadvantaged student resulted from manpower programs following the Economic Opportunity Act. Currently, the needs of handicapped students are being emphasized. In addition, Phillips (1976) lists other special groups which have been identified: unemployed youth, blacks, women, offenders, the Spanish speaking, welfare recipients, Vietnam era veterans, migrant seasonal farm workers, older workers, Indians, and scientists and engineers.

Special-needs learners present a special challenge to office educators. They have a variety of need areas which must be diagnosed. These might include: educational deficiencies, no job skills—poor work habits, poor job history, personal and social problems, and nonmotivation. (Phillips, 1976) Cultural factors also must be handled properly.

The needs of many special learners are not being met. According to Phillips (1976), " . . . there are clearly large numbers of disadvantaged students not being served by the secondary system, as proved by the numbers that come out of it, and which have called into being the whole "manpower" retrieval, or training systems." Shworles (1976) reveals a startling lack of a broad and formal commitment in federal vocational education programs for handicapped persons at the postsecondary level.

The National Advisory Council on Vocational Education reported in 1974 that the needs of disadvantaged and handicapped learners were not being adequately met. To better meet needs of these learners, the NACVE called for more individualized programming and more prescriptive teaching.

According to Johnson, "Handicapped learners may have specific problems, such as those imposed by hearing or visual impairments, or by learning more slowly than other individuals." Moreover, he found that many disadvantaged and handicapped learners appear to share the following socio-psychological characteristics:

a. a history of failure with a defeatist attitude and an extreme need for motivation to learn;
b. negative attitude toward school atmosphere;
c. immaturity, inability to start and finish, no personal responsibility, insecurity;
d. dependency (low self-concept); and
e. suspiciousness or distrust, and need for quick success. (Johnson, 1976)

These characteristics must be taken into consideration when developing individualized instructional strategies for special-needs learners.

Johnson also notes that investigations of the effects of handicaps on job performance is broadening training and employment opportunities for these special needs groups. This broadening of employment opportunities can take place in word processing.

Trudie Musier (1975), president of the Visually Impaired Secretarial Transcribers Association and educational marketing program manager for IBM's Office Products Division, states: "Management should be aware that reliance on dictating equipment and automatic typewriters enables blind employees to compete on an equal basis with sighted secretaries. Visually handicapped individuals are not at a disadvantage in performing the tasks in a word processing center. A qualified blind secretary should be able to advance through all levels of the correspondence secretary's career path, up to and including management."

Office educators have been successful in teaching special needs students. At Golden West College, the vocational and life adjustment goals of deaf students were enhanced by integrating deaf and hearing students. In summarizing her teaching experiences, Joyce Kupsh (1976) concluded that hearing-impaired students hold much opportunity for success. Problems do exist, but they can in most cases be overcome by extra effort on the part of the teacher and the student. Many times teaching methods and materials developed and used for the special needs students were beneficial to other students as well.

Ruth Cox (1975) suggests that typing teachers should have a full understanding and knowledge of each handicapped student, exercise unusual patience, not emphasize the handicap, nor underestimate the student's ability to accomplish.

These are examples of what has already been done. More can and should be done. The area of education in word processing has broadened the opportunities for office education teachers to provide instruction to special needs learners.

In light of the recent increase in concern for special needs groups, particularly the handicapped, office occupations teachers should take steps to facilitate these opportunities. The following points should be considered during the development of word processing programs. These points are based on ideas and recommendations made in articles by Cioban (1972), Curtis (1974), Gold (1971), Guatney (1969), Hodges (1969), Kleindl (1970), Lovitt (1968), Rosenberg (1974), Warner (1970), Willoughby (1970).

1. Programs should be based on the capabilities of special needs students. Often this must be done on an individual basis. Guidance personnel, relevant service agencies, and potential employers as well as teachers need to be involved in developing awareness of these capabilities.
2. Programs must be designed to provide training for which employment opportunities are available in the immediate community. Local employment surveys should be conducted in conjunction with word processing program development. Sometimes this will involve the cooperative development of positions by employer and teacher.
3. Teaching staff should be sensitive to the special needs of these learners and be technically skilled in providing for them. In-service staff development and pre-service training should include preparation for teaching special needs learners.
4. Sometimes adjustments may have to be made in course content, facilities, equipment, textbooks and other materials. In many cases these adjustments will be minor. Sometimes the students themselves can help discover and implement needed adjustments.
5. Instructional materials should be considered for their adaptability. Factors to consider are: content (subject matter, reading level, and cultural references), packaging(easy to manipulate), and design (length, modular).
6. Standards should be clear, realistic, and attainable. Educational and employment goals should be clearly defined in performance terms whenever possible. Levels of achievement should be developed in employment terms for each subject or career area.
7. Teaching and learning for these students should incorporate methods and materials which have proven effective. Visual instruction, including CAREFUL demonstration, use of charts, bulletin boards, chalkboards, models, transparencies, slides, film, and videotape can be utilized. Blinking lights can be used to develop rhythm; typewriter bells can be modified to make the keyboards vibrate; keyboards and textbooks with larger type can be used; cassette player/recorders can be used for audio instruction and vocal rough drafting; the Rochester method for "total" communication (finger spelling and lip reading), and readers and tutors can also be used.
8. Information on teaching special needs learners should be available in all office occupations departments. At first a bibliography, and eventually a file of articles, materials, and sources of information equipment, texts, etc. should be compiled by office occupations departments.
9. These steps can be taken by teachers who have no previous teaching experience with special needs learners. Teaching experience combined with adequate information about these learners can improve learning opportunities.
10. Action is needed. Rather than wait for the business community or interested special agencies to attempt to meet these needs, office occupations teachers should take action on these points as they develop word processing programs.

VII. Word Processing Bibliography and Resource Materials

PART VII

WORD PROCESSING BIBLIOGRAPHY AND RESOURCE MATERIALS

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INSTRUCTIONAL MATERIALS

Booklets and Tape Series

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The Art of Machine Transcription. Available through Science Research Associates, Inc., 259 East Erie Street, Chicago, IL 60611.

Dow, Roger W. *Legal Transcription.* Available through Western Tape, 2761 Marine Way, P.O. Box 69, Mountain View, CA 94042.

How to Dictate Effectively. Available through Dictaphone Corporation, 120 Old Post Road, Rye,

NY 10580.

McLean, G. N., and Froiland, Leslie. *Comprehensive Word Processing.* Available through Western Tape, 2761 Marine Way, P.O. Box 69, Mountain View, CA 94042.

Making the Most of Your Word Processing Center. Available through Dictaphone Corporation, 120 Old Post Road, Rye, NY 10580.

New York State Secretarial Practice Transcription Course. Available through Western Tape, 2761 Marine Way, P.O. Box 69, Mountain View, CA 94042.

Rosen, A. *AVT Machine Transcription.* Media Systems Corporation, 757 Third Avenue, New York, NY 10017.

Sharpening Your Letter Writing Skills. Available through Dictaphone Corporation, 120 Old Post Road, Rye, NY 10580.

Transcription Skills for Word Processing. Available through Science Research Associates, Inc., 259 Erie Street, Chicago, IL 60611.

Writing Out Loud. Available through Dictaphone Corporation, 120 Old Post Road, Rye, NY 10580.

Consulting, Educational, and Research Organizations

Altman & Weil, Inc.
Management Consultants
326 Lancaster Avenue
Ardmore, PA 19003

Arthur D. Little, Inc.
25 Acorn Park
Cambridge, MA 02140

Automatic Typing Institute
515 Madison Avenue
New York, NY 10022

Booz/Allen & Hamilton Inc.
245 Park Avenue
New York, NY 10017

Bruce Payne & Associates
1275 Time & Life Building
New York, NY 10019

Bryant & Stratton Business Institute
Division of Dictaphone Corporation
120 Old Post Road
Rye, NY 10580

The Business Workshop
John Hancock Center
Suite 3760
875 North Michigan Avenue
Chicago, IL 60611

Datapro Research Corporation
1805 Underwood Boulevard
Delran, NJ 08075

Dataquest, Inc.
480 California Avenue
Palo Alto, CA 94306

FDI Financial Corp.
Administrative Services Division
300 Delaware Avenue
Wilmington, DE 19801

Frost & Sullivan, Inc.
106 Fulton Street
New York, NY 10038

Glennie & Associates
Management Communications Consultants
2 Bracknell Circle
Rockville, MD 20850

International Word Data
15 Maiden Lane
Suite 1104
New York, NY 10038

Marshall, Roberts & Co., Inc.
2 Penn Plaza
Suite 1500
New York, NY 10001

Naremco Services Inc.
60 E. 42nd Street
New York, NY 10017

Office Communications Consultants, Inc.
One North LaSalle Street
Suite 2421
Chicago, IL 60602

Quantum Science Corporation
245 Park Avenue
New York, NY 10017

Stanford Research Institute
333 Ravenswood Avenue
Menlo Park, CA 94025

Thomas Wilds Associates
50 East 41st Street
New York, NY 10017

Training Resources Group Inc.
200 Park Avenue
New York, NY 10016

Truax, Smith & Associates
800 Delaware Avenue
Wilmington, DE 19801

Word Processing Associates Inc.
250 Riverside Drive
New York, NY 10025

Word Processing Innovators, Inc.
610 N. Water Street
Milwaukee, WI 53202

Word Processing Institute
37 West 72nd Street
New York, NY 10023

Films

Breaking the Production Barrier. A 14-minute,

color film on productivity. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

Business Machine Operations. A 7-minute, 16mm, sound motion picture in color. Available through Sterline Educational Films, A Division of the Walter Reade Organization, Inc., 241 East 34th Street, New York, NY 10016.

Dictation—Napoleon to Now. (WP:F); 12 minutes. The world of word processing starts with the word originator. A humorous beginning shows how everything can go wrong in dictating. This film provides key points in assisting an individual to make the best possible use of his or her dictation skills. Simple step-by-step guidelines are given for originating better communication today. Available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

First Time Final. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

46–40 Document Printer. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

From Thoughts to Words to Action. A 12-minute, color film on the evolution of automatic typing and text editing. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

Impressions Beyond Words. An 11-minute, color film on coping with resistance to change. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

"In" Side Word Processing. A 9-minute, 16mm, sound motion picture in color, 1975. Describes Edison's ediphone to today's dictating machines and systems. See how the different types and features of the newest equipment will make it easier for the author and transcriber to communicate quickly and accurately. In the government and business office, this film will help all cooperate in making and understanding equipment and media choices—while the student will receive an overview of the choices now available. Available through Information Management Corporation, 610 North Water Street, Milwaukee, WI 53202. Also available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

It's Really People. (WP:E); 12 minutes. Whether people are selecting positions and careers, or employers are selecting new people, costly and unfortunate mistakes can be avoided by better information. Experienced supervisors share their knowledge in hiring successful word processors and administrative support secretaries. They also offer their ideas for hiring, training, and management of word processing installations. Available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

Kissing "The Girls" Goodbye. (WP:B); 13 minutes. Do you get the tough job of defining new professional roles in word processing—and getting them understood and accepted by bosses and secretaries? Boss-secretary office traditions are challenged in a delicate manner with a light touch and hard facts that get people to examine their fears of change and open themselves to new concepts. Available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

MT/ST Demonstration. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

New Way to Set Type. A 10-minute, color film. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

"Out" Side Word Processing (WP:H); 13 minutes. With the broad range of word processing electronic and computerized equipment available on the market, this film reviews "output" choices and explains the basic types and applications of software and hardware. It provides business, government, and education with an understanding of terminology and general capabilities in our offices today—again, an informed selection will help guarantee later cooperation and installation success. Available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

Paperwork Explosion. A 6-minute film. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

The Pivot Point. A 12-minute, 16mm film discussing advantages to managers who use word processing. Middle management starts most of the written communications and paper work—without positive understanding and cooperation, word processing can fail. This film projects the psychology and problems of change in the organizational structure while managers and professionals explain the direct benefits to those who use it wisely. Available through Information Management Corporation, 610 North Water Street, Milwaukee, WI 53202. Also available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

The Rules of the Game. Getting a company into word processing—changing to new equipment and new procedures, and understanding new office technology. Available through Information Management Corporation, 610 North Water Street, Milwaukee, WI 53202.

Take It from the Top. A 16mm film. A talk with top management about implementing changes in office structure, environment, and attitudes. Available through Information Management

Corporation, 610 North Water Street, Milwaukee, WI 53202.

A View of the Office. Available through IBM Corporation, Office Products Division, Parson's Pond Drive, Franklin Lakes, NJ 07417.

What's It All About? (WP:A); 11 minutes. From antiquity to today, our communications methods have changed many times. And change was not easy. This film shows that word processing is the most recent opportunity in humanity's long history of refining communications. It defines word processing and prepares the viewer for better understanding of the operations and advantages of this idea for people and organizations. Available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

Word Processing: The Office of the Future. 1976. Available through Media Systems Corporation, 757 Third Avenue, New York, NY 10017.

Worries and Wonders. A 15-minute, 16mm, sound motion picture in color, 1975. In this film a group of former personal secretaries talk about word processing and how it has affected their jobs. The secretaries indicate how apprehensive they were of this new system. The film takes a look at the equipment, opportunities and challenges of word processing. In fact, one secretary states that word processing is the "most beautiful thing that can happen to a secretary." Available through Information Management Corporation, 610 North Water Street, Milwaukee, WI 53202. Also available through the Agency for Innovative Curriculum, Inc., 580 Sylvan Avenue, Englewood Cliffs, NJ 07632.

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Professional Associations

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Word Processing Society
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Publications

Administrative Management
Geyer-McAllister Publications, Inc.
51 Madison Avenue
New York, NY 10010
(Published monthly)

AICS Compass
Association of Independent Colleges and Schools
1730 M Street, N.W.
Suite 401
Washington, DC 20036
(Published monthly)

The Balance Sheet
South-Western Publishing Company
5101 Madison Road
Cincinnati, OH 45227
(Published monthly September through May)

Business Education Forum
National Business Education Association
1906 Association Drive
Reston, VA 22091
(Published monthly October through May)

Business Education World
Editorial Office
1221 Avenue of the Americas
New York, NY 10020
(Published five times each school year)

Business Graphics
Graphic Arts Publishing Co.
7373 North Lincoln Avenue
Chicago, IL 60646
(Published monthly)

Corporate Systems
United Technical Publications, Inc.
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645 Stewart Avenue
Garden City, NY 11530
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The Dartnell Office Administration Service
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4660 North Ravenswood Avenue
Chicago, IL 60646

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Gustavus Adolphus College
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(Published quarterly)

Forbes
60 Fifth Avenue
New York, NY 10011
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Infosystems
Hitchcock Publishing Company
Hitchcock Building
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Information and Records Management
Information and Records Management, Inc.
250 Fulton Avenue
Hempstead, NY 11550

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Journal of Data Education
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Management Report on: Word Processing Text Edition/Auto Typing Equipment
Office Management Systems Corporation
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New York, NY 10023

Management World
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AMS Building, Maryland Road
Willow Grove, PA 19090

Measurement and Control of Word Processing Operations
Bruce Payne
Time-Life Building
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Modern Office Procedures
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Word Processing Report
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Word Processing Systems Management
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Word Processing Training Programs
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Sources of Instructional Materials

A. B. Dick Company
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Chicago, IL 60648
(Magna I typewriting system)

Addison-Wesley Publishing Company, Inc.
Reading, MA 01876
(Dictation skills: Cassette and workbook)

Agency for Innovative Curriculum, Inc.
580 Sylvan Avenue
Englewood Cliffs, NJ 07632
(A model office simulation with a supplemental component package planned for word processing; word processing films)

The Bobbs-Merrill Company, Inc.
Educational Publishing Division
4300 West 62nd Street
Indianapolis, IN 46206
(Human relations skills & speedwriting: Cases, filmstrips, and cassettes)

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(Word processing: Concepts, language skills, dictating skills—transparencies)

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Educational Resources Foundation
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(Human relations skills: 16mm and ¾" videocassettes)

ESP, Inc.
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Jonesboro, AR 72401
(*Word Processing: A Comprehensive Training Program for Word Originators and Transcriptionists*, 1977. Includes a set of 12 cassettes and student workbook)

IBM Corporation
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Parson's Pond Drive
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(Word processing: Concepts—secretarial, management, business education)

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Media Systems Corporation
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(Word processing: Career orientation, automatic typewriters (IBM), machine transcription, administrative skills, and human relations skills)

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Word Processing Training Programs
P.O. Box 409
Daytona Beach, FL 32015
(Word processing: Concepts, real work, dictation skills, and administrative skills)

Textbooks

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VIII. Appendices

PART VIII

APPENDIX A

Sample Job Descriptions for Word Processing Personnel

The job descriptions identified are those used by Scott Graphics, South Hadley, Massachusetts, and are offered as an example of one company's word processing positions.

JOB TITLE: Corresponding Secretary

RESPONSIBILITY:

Transcribes proficiently all types of dictation from PBX Recorders on MC/ST equipment, consistently maintaining high productivity and meeting established deadlines.

RELATIONSHIPS:

Reports to Supervisor, Word Processing Center. Supervision is of the "progress and results" type. Maintains frequent contact with dictators, assisting them in format and setting up special documents. Offers guidance to dictators to correct poor dictating habits, improve clarity, etc. Contacts with various persons and departments in regard to projects require tact and the ability to apply effectively knowledge of machine capability to work application.

SPECIFIC DUTIES AND SKILLS:

Performs diverse typing services requiring fundamental knowledge of company procedures and general operations.

1. Complex statistical reports.
2. Highly technical reports requiring familiarity with sophisticated nomenclature.
3. Confidential material.
4. Special requests of varied nature.

Edits copy as typed to correct grammar and provide proper punctuation.
Proofreads finished copy.

PROBLEMS ENCOUNTERED:

Works in centralized, highly pressurized typing environment requiring interaction with others in group whose productivity is measured daily.
Follow company procedures; e.g., memo, letter, report format.
Meeting deadlines.
Poor handwriting.
Vague instructions.
Establishing priorities (referred to Supervisor).
Record retention (referred to Supervisor).

JOB TITLE: Composer, Corresponding Secretary

RESPONSIBILITY:

Transcribes proficiently all types of dictation from PBX recorders on MC/ST equipment, consistently maintaining high productivity and meeting established deadlines.
Operates Composer to provide camera-ready copy for printing on photographic equipment.

RELATIONSHIPS:

Reports to Supervisor, Word Processing Center. Supervision is of the "progress and results" type. Maintains frequent contact with dictators, assisting them in format and setting up special documents. Offers guidance to dictators to correct poor dictating habits, improve clarity, etc. Works with Copy Center and consults with IBM on Composer prepared copy.

SPECIFIC DUTIES AND SKILLS:

Performs diverse typing services requiring fundamental knowledge of company procedures and general operations.

1. Complex statistical reports.
2. Highly technical reports requiring familiarity with sophisticated nomenclature.
3. Confidential material.

Edits copy as typed to correct grammar and provide proper punctuation. Proofreads finished copy. Prepares forms, literature, brochures and a wide range of specialized applications on Composer, exercising judgment and a degree of artistic skill for formatting and paste-up of camera-ready copy; organizes data to conform to rigid Government manual specifications.

PROBLEMS ENCOUNTERED:

Works in centralized, highly pressurized typing environment requiring interaction with others in group whose productivity is measured daily.
Following company procedures; e.g., memo, letter, report format.
Meeting deadlines.
Poor handwriting.
Vague instructions.
Establishing priorities (referred to Supervisor).
Record retention (referred to Supervisor).

JOB TITLE: Bilingual Secretary

RESPONSIBILITY:

Transcribes proficiently all types of dictation from PBX recorders on MC/ST equipment, consistently maintaining high productivity and meeting established deadlines.
Translates Spanish, Portuguese, and Italian; serves as a Spanish interpreter.

RELATIONSHIPS:

Reports to Supervisor, Word Processing Center. Supervision is of the "progress and results" type. Maintains frequent contact with dictators, assisting them in format and setting up special documents. Offers guidance to dictators to correct poor dictating habits, improve clarity, etc. Translates orders, letters, etc. from Spanish customers for International and serves as an interpreter for International.

SPECIFIC DUTIES AND SKILLS:

Performs diverse typing services requiring fundamental knowledge of company procedures and general operations.

1. Complex statistical reports.
2. Highly technical reports requiring familiarity with sophisticated nomenclature.
3. Confidential material.

Edits copy as typed to correct grammar and provide proper punctuation.
Proofreads finished copy.
Translates orders, letters, inquiries, etc. from Spanish. Serves as an interpreter for Spanish-speaking visitors. This requires the ability to clearly translate highly technical product specifications to customers/dealers. A knowledge of the country and customs is also an asset in working with these Spanish visitors.

PROBLEMS ENCOUNTERED:

Work in centralized, highly pressurized typing environment requiring interaction with others in group whose productivity is measured daily.
Following company procedures; e.g., memo, letter, report format.
Meeting deadlines.
Poor handwriting.
Vague instructions.
Establishing priorities (referred to Supervisor).
Record Retention (referred to Supervisor).

JOB TITLE: Senior Corresponding Secretary

RESPONSIBILITY:

In Supervisor's absence, acts as back-up including scheduling, checking, doing paperwork, relationship with principals, etc. Transcribes proficiently all type of dictation from PBX Recorders on MC/ST equipment, consistently maintaining high productivity and meeting established deadlines.

RELATIONSHIPS:

Reports to Supervisor, Word Processing Center. Maintains frequent contact with dictators, especially during Supervisor's absence, assisting them in format and setting up special documents. Offers guidance to dictators to correct poor dictating habits, improve clarity, etc. Contacts with various persons and departments in regard to projects, requires tact and the ability to effectively apply knowledge of machine capability to work application. Assists Supervisor with training.

SPECIFIC DUTIES AND SKILLS:

Performs diverse typing services requiring fundamental knowledge of company procedures and general operations.

1. Complex statistical reports.
2. Highly technical reports requiring familiarity with sophisticated nomenclature.
3. Highest nature confidential material.
4. Special requests of varied nature.
5. Assists other secretaries in Center because of overall knowledge of Company.

Edits copy to correct grammar and provide proper punctuation.
Proofreads finished copy.

PROBLEMS ENCOUNTERED:

Work in centralized, highly pressurized typing environment requiring interaction with others in group whose productivity is measured daily.
Supervisory problems when acting in that capacity in absence of Supervisor, such as scheduling, making necessary decisions, establishing priorities, etc.
Following company procedures; e.g., memo, letter, report format.
Meeting deadlines.
Poor handwriting.
Vague instructions.
Checking and distribution of processed documents.

JOB TITLE: Administrative Clerk, Administrative Support Cluster

RESPONSIBILITY:

Provides clerical services as assigned in support of principals as part of Administrative Support Team.

RELATIONSHIPS:

Reports to Administrative Supervisor. Receives day-to-day functional guidance and specific work instructions and assignments from Administrative Assistant(s)/Administrative Secretary(s).

SPECIFIC DUTIES AND SKILLS:

Performs diverse clerical services requiring a general knowledge of office procedures.

1. Types forms, labels.
2. Serves as receptionist.
3. Copies, collates and distributes documents as assigned.
4. Provides back-up telephone answering, taking and delivering messages.
5. Files and retrieves various materials as directed.
6. Opens mail, rough sorts and distributes as directed.
7. Assists in gathering basic data and preparation of reports.

8. Uses office machines such as calculator, adding machine, etc.
9. Prepares and updates standard operating procedures for Cluster Operations Manual.
10. Cross trains with others in Administrative Support Team.

PROBLEMS:

Team member in a working environment requiring volume output, high level of accuracy and efficiency and the meeting of stringent deadlines, as well as a high degree of cooperation with others in immediate group.
Seeks guidance of Administrative Assistant/Administrative Supervisor as needed relative to priorities, work instructions, procedures, policies.

JOB TITLE: Administrative Secretary, Administrative Support Cluster

RESPONSIBILITY:

Provides secretarial and administrative services as assigned in support of principals as part of Administrative Support Team.

RELATIONSHIPS:

Reports to Administrative Supervisor. Receives day-to-day functional guidance and specific work assignments from Administrative Assistant. Provides day-to-day functional guidance and training to Administrative Clerk(s).

SPECIFIC DUTIES AND SKILLS:

Performs diverse secretarial, administrative and clerical services requiring good grammar, punctuation, spelling, arithmetic and a fundamental knowledge of Company policies and procedures.

1. Maintains files, records, budgets, assigns filing to Administrative Clerk.
2. Dictates to Word Processing from handwritten matter.
3. Proofreads Word Processing material, verifies figures.
4. Answers telephones, responding to telephone inquiries, and refers others to proper persons.
5. Cross trains with others in Administrative Support Team.
6. Provides limited typing in those instances in which Word Processing cannot efficiently handle, e.g., forms, labels, index cards.
7. Trains Administrative Clerk(s) relative to cluster and Company procedures and in development of basic skills required.
8. Prepares and updates as required written standard operating procedures for inclusion in Cluster Operations Manual.
9. Provides functional day-to-day guidance and training to Administrative Clerk(s).
10. Prepares reports using basic data provided by Administrative Clerk.
11. Cross trains with others in Administrative Support Team to develop ability to handle more complex and challenging duties.

PROBLEMS:

Team member in a working environment requiring volume output, high level of accuracy and efficiency and the meeting of stringent deadlines, as well as a high degree of cooperation with others in immediate group.
Seeks general guidance of Administrative Assistant/Administrative Supervisor as needed relative to priorities, working instructions, procedures and policies.

JOB TITLE: Senior Administrative Assistant, Administrative Support Cluster

RESPONSIBILITY:

Provides administrative services as assigned and serves as a lead member of Administrative Support Team functionally supervising Administrative Secretary(s) and Administrative Clerk(s) in Administrative Support Team area.

RELATIONSHIPS:

Reports to Administrative Supervisor. Receives general guidance and working instructions from Administrative Supervisor. Interfaces with Word Processing and interacts with others in Administrative Support Cluster, cross training and acting as a para-professional assistant to principals. Provides functional supervision and training to Administrative Secretary(s) and Administrative Clerk(s).

SPECIFIC DUTIES AND SKILLS:

Performs diverse and complex administrative services requiring overall knowledge of Company policies, procedures, organizational functions, products, a broad working knowledge of departments and functions serviced and excellent administrative skills.

1. Composes and dictates correspondence, memoranda, reports.
2. Arranges meetings, appointments, travel plans.
3. Prepares charts, graphs, visuals.
4. Prepares standard and non-routine reports including basic and more complex anlaysis.
5. Answers telephones and responds directly to inquiries, orders, etc., from own knowledge or by seeking information requested.
6. Prepares and updates standard operating procedures for Cluster Operations Manual.
7. Provides functional training and leadership in development of other members of Administrative Support Team to achieve maximum efficiency, output and flexibility.
8. Plans and distributes work load to those functionally supervised to assure efficient, accurate and timely completion of work assignments

and projects.

9. Provides day-to-day functional supervision to Administrative Secretary(s) and Administrative Clerk(s).

PROBLEMS:

Team member in a working environment requiring volume output, high level of accuracy and efficiency, and the meeting of stringent deadlines, as well as a high degree of cooperation with others in immediate group.

Seeks guidance of Administrative Supervisor as needed relative to priorities, work instructions, procedures, policies.

APPENDIX B

GLOSSARY OF WORD PROCESSING TERMS

The following list of word processing terms was developed from those listed in these sources:

Dartnell's Glossary of Word Processing Terms. Chicago: The Dartnell Corporation, 1975.

Fetridge, Clark, and Minor, Robert S. eds. *Office Administration Handbook.* Chicago: The Dartnell Corporation, 1975.

Rosen, Arnold, and Fielden, Rosemary. *Word Processing.* Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1977.

Taylor, Connie. "Word Processing Supervisor's Manual." Nationwide Insurance Companies, Columbus, Ohio.

It should be noted that because of the newness of word processing terminology, some of the terms carry brand-name identification.

Glossary of Word Processing Terms

AM
Administrative management; administrative manager.

AMS
American Management Society.

APS
Alphanumeric photocomposer system.

AS
Administrative support.

ASK
American Simplified Keyboard.

ATS
Administrative terminal system. A software package using a typewriter I/O device linked to a computer to process and retrieve information.

ACCESS TIME
The time taken by a computer to locate data or an instruction word in its memory or storage selection and transfer it. Also, the time taken to transfer information from the input device to the location in the memory where it will be stored.

ACOUSTIC COUPLER
A device which converts recorded data into signals for transmission, over telephone lines, to a computer from I/O devices, mag tape, cards, paper tape, etc.

ADMINISTRATIVE CENTER
An area where secretarial specialists perform activities other than typing, such as mail handling, filing, telephoning, and special projects.

ACTIVE DOCUMENT
A document requiring original thought. Research, organization, proofreading, and revision are generally required. Error-free copy is often needed.

ACTIVITY-ORIENTED
Term used to define an AS operation in which aides are specialized by task, as distinct from one in which aides are "principal-oriented" and do many tasks for specific executives.

ADDRESS
(1) Name given to a specific location of encoded material on a recording medium. An address could be designated by a line number. (2) The act of finding such a location, usually through machine instruction.

ADJUST
A text-editing typewriter feature in which the machine automatically adjusts the right-hand margin if one inserts or deletes copy during the playback or changes margins in any way.

ADMINISTRATIVE AIDE
A job title also sometimes designated as "administrative support aide" or "administrative secretary."

ADMINISTRATIVE MANAGER
A general executive responsible for numerous information and support operations, including word processing, data processing, recordkeeping, in-plant repro, mail systems, telecommunications, and office furnishings.

ADMINISTRATIVE SECRETARY
A secretary who supports a principal(s) with activities other than typing such as mail handling, filing, telephoning, and special projects.

ADMINISTRATIVE SUPERVISOR
The person in charge of an administrative center; a supervisor of administrative secretaries.

ADMINISTRATIVE SUPPORT
One of the two broad areas of specialization under word processing (the other being typing). In general, it comprises all the nontyping tasks associated with traditional secretarial work carried out under administrative supervision.

ALIGN/ALIGNMENT
Horizontal reference line used when inserting forms.

ALLOWANCES
Time which is computed into a work standard

for fatigue, rest time, activity reporting, and other normal delays.

ALLOWED TIME
The time fixed as a standard for performing a given task. Also sometimes designated as "standard time" or "standard allowed hours."

ALTERNATE SECTION
Expandable part of 8,000 character memory (Mag Card II).

ANNOUNCEMENT UNIT
Answers incoming phone calls and gives a prerecorded message. At end of message, unit usually switches audio from outgoing to incoming permitting callers to leave recorded messages.

APPLICATIONS
Refers to a type of document processed for a particular purpose or in a special way.

ATTENDANT PHONE
In a central dictation system, a phone which allows the word originator to communicate with an attendant in the word processing center or other remote recorder location.

AUGMENTED MODE; AUGMENTED SYSTEM
An administrative support arrangement which introduces some WP/AS principals into a traditional secretarial environment with little or no change in the office layout.

AUTOMATED TYPEWRITER
A general term covering all types of WP keyboard equipment.

AUTOMATIC FORWARD RESET
Feature of central telephone dictation recorders which enables the recorder to continue in playback mode to the end of recorded dictation, even though the person reviewing the dictation has disconnected. The next dictator thus begins recording on an unused part of the medium.

AUTOMATIC REPEAT KEY
A "live" typewriter key, such as the underscore, which will continue to operate as long as the key is depressed.

AUTOMATIC REVERSE
The ability of some dictation recorders to reverse at the end of a tape for playback without having to change reels, etc.

AUTOMATIC SELECTOR
In telephone dictation, a connection method which automatically links the handset to the first free recording unit available for input.

AUTOMATIC TYPEWRITER
The simplest of the automated typewriters, used mainly for straight, repetitive output involving little or no text editing. Used for rapid production of form letters and similar documents.

AUTOMATIC WORD RECALL
An adjustable feature of a transcriber unit which enables the word originator or the transcriptionist to replay a measured portion of the previous dictation by depressing the foot pedal or hand control.

AVAILABILITY
The time, or percentage of time in a certain period, during which a piece of equipment functions properly.

AVERAGE LETTER
Approximately 92–115 words or 18–23 lines of 12-pitch typing. As the standards are hard to define, this method of meaurement is generally unsuitable and is not a widely recognized standard.

BSC
Back Space Code; functional code on magnetic keyboards.

BACKLOG
A reserve of unprocessed work.

BACKSPACE CODE
A key-operated instruction which backspaces the carriage or carrier of a WP typewriter without backspacing the recording medium. It is used, for example, in underscoring.

BACKSPACE STRIKEOVER
Correcting method that through magnetic media allows the keyboard technician to immediately correct typographical errors.

BASEPLATE
A device attached to the underside of certain non-automated typewriters, enabling performance of various automated typing functions, including text editing and playback.

BASKET
Term applied to the typing mechanism of a standard typewriter in which each character, as a capital and lower-case pair, is conveyed on a separate typebar—the entire set of typebars being "basketed" in a curved array in front of the platen. See also "single-element," "typing element," and "typing mechanism."

BATCH
A collection of similar work which can be processed at one operation.

BATCH CONTROL
A control device which permits the issuance of predetermined quantities of work to an employee at regular intervals of time.

BATCH RECORDING
Same or similar documents are recorded on magnetic media, or into memory in groups whenever possible (forms, form letters).

BEATING THE SHIFT
A typewriter action in which a very fast or erratic typist causes a character to malprint following or preceding a shift.

BIT
The smallest unit of information recognized by a computer. Also, an abbreviation for "binary digit."

BLACK BOX
Refers to the operating unit or "brains" of an electronic system; slang term for a central processor unit.

BLEEDING
(1) A term referring to the "splashing" or "bleeding" of carbon material from a carbon ribbon onto the paper or into the typewriter mechanism.
(2) Intermingling of the differently colored inks in a red/black typewriter ribbon.

BOILER PLATE
Construction of a document using parts of many other documents or a list or paragraphs.

BUFFER
An 8,000 character solid state memory in the Mag Card II.

BYTE
A sequence of adjacent binary digits operated upon as a unit and usually shorter than a word.

CMC
Communicating Mag Card. Magnetic keyboard used for either point-to-point communications or as a computer terminal.

CPI
Characters per inch.

CPS
(1) Certified Professional Secretary.
(2) Cycles per second.

CPU
Central processor unit.

CR
Carrier return.

CRT
Cathode ray tube. A vacuum tube in which a beam of electrons can be focused to a small point on a luminescent TV tube screen and can be varied in position and intensity to form alphanumerical characters.

CT/ST
Cassette Tape/Selectric Typewriter.

CALENDAR OF CONVERSION
A calendar developed to schedule the implementation of a WP system.

CAPSTAN
The driven shaft in a tape dictation recorder, usually the motor shaft, which rotates against the reel or cassette hub, pulling the tape through the machine during input and playback.

CARBONLESS OR CARBON-COATED BUSINESS FORMS
Business forms that permit impressions from copy to copy without the use of carbon. The image is made when special coatings on the back of one sheet and the face of the following sheet are brought together under pressure.

CARBON SETS
A multi-ply form manufactured with carbon paper interleaved between the original and tissue copies.

CARBON SPLASH
(See Bleeding.)

CARD CONSOLE
Separate unit attached to the typewriter of a magnetic keyboard that utilizes magnetic cards.

CARD FOLDER
Protector folder into which magnetic cards are inserted for storage.

CAREER PATHS
Lines of progression from one position to another, established by management to provide opportunities for advancement to higher level jobs.

CARTRIDGE
A container of magnetic tape, usually associated in word processing with MT/ST equipment. Available in 35, 50, 100, and 120 foot lengths of 16 mm. magnetic tape. MT/ST recording density is 20 characters per inch, or approximately 24,000 characters per reel of 100 foot tape.

CASSETTE
A container of magnetic tape, two reels of 1/8", used with certain dictation equipment as well as with certain WP typing equipment. Relatively inexpensive, it is used extensively in portable recording machines, the standard tape drive speed is 1 7/8 inches per second. Can store approximately 60,000 characters in text editing typewriter use.

CENTER
(1) To position typing with a given measurement equidistant from the margins.
(2) Command to a WP typewriter that it automatically center lines during playout.

CENTREX
A telephone switching system allowing direct dialing to an extension phone without going through a manned switchboard.

CHAD
The small pieces of paper tape or punch card removed when a hole is punched.

CLERICAL ADMINISTRATIVE SUPPORT
Unit that supports word processing center by providing the following services: batching, logging, dictation, filing, decolating, bursting, signing, mailing, and quality control.

CLERK
An employee responsible for correspondence records or accounts or to perform general office work.

CLIPPING
A condition in dictation where the first part of a word is not recorded because the mechanism does not engage fast enough.

CODE
(1) The pattern or system of signals, recorded on media, which stand for alphanumeric characters or machine actions.
(2) Name given to the specified instruction or action required of a typing unit in playback; a

command—i.e., "center," "indent," "justify," "stop."

COLD TYPE
(1) Text, usually intended for offset reproduction, produced by a direct-impression typewriter mechanism of through photocomposition.
(2) Term applied to systems which produce cold-type text, as distinguished from "hot type" or "hot metal" systems such as Linotype.

COMMAND
An instruction to a machine, such as a WP typewriter, to perform a certain action.

COMMAND KEY
A key which, when hit, enters a particular command into a system.

COMMUNICATING TYPEWRITER
A WP typewriter which can send text to, and receive text from, another communicating typewriter or in exchange with a computer, over phone lines or via other telecommunications hook-ups.

CONFIGURATION
The layout of a word processing station or center.

CONNECT TIME
The length of time in which a unit such as an ATS terminal is connected to a computer.

CONSOLE
The unit housing the record/playback mechanism and related controls on some text editing typewriters.

CONSTANT
Term used to define information that is placed in permanent storage.

CONTINUOUS FORM STATIONERY
One set of forms is joined to another in a series of accordion-pleated folds.

CONTINUOUS LOOP
A recorder system employing an endless loop of magnetic tape as the recording medium.

CONTROL CLERK
Individual responsible for maintaining input equipment, logging, work distribution and some quality review.

COPY
Textual input; material worked from to prepare final or hard copy.

COPY FILM
Mylar sheet with chemically treated ink molecules used to produce high quality copies while typing. (Use in place of carbon paper.)

COPY REVISION
Includes console preparation, automatic playback when making corrections due to editorial changes, and activating of various playback controls. Console adjustments are included, if required.

CORRECTABLE FILM RIBBON
Polyethylene carbon ribbon used in conjunction with lift-off correction tape.

CORRECTION FLUID
A liquid coverup applied over an error that blends into the paper.

CORRECTION PAPER
A chalk-coated strip of paper, coated on one side. The typist places the coated side against the error and retypes the error so that some of the chalk transfers and covers it.

CORRECTION TAPE
Includes either lift-off or cover-up tape, used on Mag Card II/Memory Typewriter or other keyboards with a similar correcting mechanism.

CORRESPONDENCE CENTER
(1) A WP center.
(2) A secretarial group performing typing activities.

CORRESPONDENCE CENTER SUPERVISOR
A supervisor of correspondence secretaries.

CORRESPONDENCE SECRETARY
A secretary responsible for typing activities and assigned to a correspondence center; a WP operator.

CROSS TRAINING
The switching of personnel among various workstations so that they may learn more than one job.

CURSOR
The movable dot on a CRT screen which shows the place, on a displayed document, for entering new text or making editing changes.

DDRP
Dial Dictation Relay Panel.

DE
Dictation equipment.

DIS
Dial Input System.

DP
Data processing.

DSK
Dvorak Simplified Keyboard. An improved typewriter keyboard rearrangement whereby, through scientific key placement, 35 percent average faster productivity is claimed over the conventional keyboard arrangements. First patented in 1932 by Dr. August Dvorak of the University of Washington in Seattle.

DEAD KEY
An electric typewriter key which does not automatically advance the machine to the next character position when struck.

DEDICATED RECORDER
Recorder devoted exclusively to one type of dictation or specific individual(s).

DELEGATION OF AUTHORITY
The process of establishing and maintaining effective working arrangements between a word processing manager and the people who report to him/her. Delegation results when the perform-

ance of specific work is entrusted to another, and the expected results are mutually understood.

DIABLO
Trade name of a typing mechanism employing a high-speed, interchangeable printwheel.

DIAL SEIZURE
Gaining access and control of a recorder system unit by dialing assigned telephone numbers. In some cases this also includes switching on motors.

DICTATION SPEED
Median dictation speed of 60 words a minute.

DIRECT IMPRESSION
Term applied to text-production techniques in which each character is struck onto the paper, as in conventional typing.

DISCRETE MEDIA
Term applied to recording media that are individually distinct—that can be filed, mailed, moved, and otherwise separately handled. In DE, for example, belt, disk, cartridge, and cassette media are "discrete;" endless loop media are not.

DISPLAY
(1) Term applied to the screen of a CRT-equipped WP typing system, as well as the textual images appearing on that screen.
(2) The act of commanding a CRT-equipped WP system to produce specified text on its screen.

DISTORTION
Any difference between the regular audio signal and that played back by the recording device.

DOCUMENT
Copy.

DOLBY SYSTEM
Circuitry used primarily in audio recording equipment to reduce the amount of noise, principally tape "hiss" introduced during recording.

DOT LEADER
A WP typing command which automatically places a series of periods between two items of copy, as in index work.

DOUBLE VOICING
A condition most commonly found in earlier magnetic belt recording systems where an echo effect was noticeable until the transcriber sound head was tuned to the same place and on the same track where the recording was made.

DOWNTIME
Time when equipment is not in use due to malfunction.

DRAFT
A rough and unedited outline of a document.

DROPOUT
During playback, the brief loss of a recorded signal due to tape imperfection.

DUAL MEDIA TYPEWRITER
Automatic typewriter with the capability of using two media— magnetic card and/or cassette.

DUAL TRACK RECORDER
Usually a monophonic recorder with a recording head gap covering less than ½ the width of the tape. This permits recording one track on the tape in one direction and by turning the tape over, a second track in the opposite direction.

DVORAK SIMPLIFIED KEYBOARD
(See DSK)

EDP
Electronic data processing; in general, computer operations. Also referred to as DP.

EDITING
(1) Reading back, scanning, deleting, inserting, and reformatting.
(2) The act of revising and correcting text or a manuscript prior to its production as a final document or publication.
(3) The act of operating the function and alphanumeric keys of a WP typewriter to alter the recorded text it will eventually play out automatically.

ELECTROSTATIC PRINTING
A system whereby images or alphanumerics are "burned" into the paper electrically.

ELEMENT
(1) Golf ball size sphere that holds all type characters on magnetic keyboards. Available in different type styles and pitches.
(2) In WP, usually a reference to the typing component on an automated typewriter, such as the Diablo or Qume printwheel or the Selectric "golf ball."

ELITE
(1) The smaller of two common typewriter typeface sizes, the larger being "pica."
(2) A standard of typewriter spacing, 12 characters to the horizontal inch, also called "12 pitch."

EMBOSSED MEDIA
In DE, a vinylite disc or belt recording media whose sound tracks are grooved like a phonograph record by an embossing needle, in contrast to magnetic media.

ENDLESS LOOP
Term applied to a family of DE systems which employ sealed, continuous loops of magnetic tape as recording media. The tapes are kept in containers called "tanks."

END OF RIBBON SHUT-OFF
Standard feature on Mag Card II that automatically prevents continuous playout when ribbon runs out.

ERROR-FREE
A feature of magnetic recording media whereby the user can dictate over any errors in the last phrases.

FABRIC RIBBON
Typewriter ribbon made of cotton, nylon, or silk.

FACSIMILE
The process of transmitting textual and illustrative copy electronically, sometimes by radio but

in office operations more typically by telephone. Documents scanned on a rotating drum at the sending site are recreated on a comparable drum at the receiving site.

FAN FOLD
Refers to paper tape supplied in convenient flat folded form.

FAST FORWARD
A tape recorder feature which permits the tape to be run rapidly in normal play direction for search purposes.

FEED CODE
A "no action" code recorded to block out any unwanted character.

FILM RIBBON
Usually a mylar carbon typewriter ribbon.

FINAL COPY
A correct finished document.

FLEXIBLE STAFFING
Use of temporary/casual/part-time employees to meet peak workloads.

FLICKING
A term referring to too rapid use of the Selectric Keyboard whereby random hyphens appear.

FLOPPY DISK
A recording medium used in certain WP typing systems, called "floppy" to distinguish it from the rigid version often employed in computer memories.

FLOWCHART
A graphic representation of the sequence of work from origin to completion in which symbols are used to represent operations and equipment.

FONT
An assortment of type of one size and style, including a due proportion of all the letters in the alphabet.

FOOT PEDAL
Activates transcribing machine. By pressing the center of the pedal, the operator can listen to recorded dictation. By operating other parts of the foot pedal, the operator can reverse and "fast forward" dictation.

FORMAT CARD PROCEDURE
Procedure whereby just formatting instructions are recorded on a card (tabs, carrier returns and stop codes).

FORM LETTERS
The same basic letter to be sent out to a number of different people, usually prepared in advance and duplicated.

FOUR TRACK RECORDER
An arrangement whereby four different sound channels can be recorded on audio tape. Conventionally, tracks 1 and 3 are recorded in the "forward" direction, with tracks 2 and 4 being recorded in the "reverse" direction.

FUNCTION
(1) An identifiable operation or segment of ongoing work.
(2) The operational unit, line or staff, responsible for such work.
(3) A performance feature of a WP typewriter, such as an editing capability or automatic action.

GALLEY PROOF
A preliminary printout of type in columnar form, for checking purposes.

GAZETTEER
Portion of dictionary that lists names of places cities, states, towns, etc.) as well as information on their location, population. Useful to transcribers to check the spelling of names of places to which correspondence is sent.

GIRL FRIDAY.
Clerk.

GLIDE TIME
A timekeeping principle where, within limits, the employee sets his/her own starting time.

GOOF SHEET
An interoffice form in which word originators and WP personnel can note down suggestions to one another for improving service and avoiding problems.

GROSS DOCUMENTS
Number of pages typed including those re-typed.

GROSS LINES
Number of lines typed including those re-typed.

GROUPING
The combining of secretarial or typing workstations to facilitate supervision and improve support for principals.

HARD COPY
Written, typed, or printed matter; a document.

HARDWARE
The electrical, electronic, magnetic and mechanical devices comprising a system.

HEADLINER
A photolettering machine which produces headlines and other large "display" copy.

HOT ZONE
The area, adjustable in width, for controlling the right-hand margin of text. When a line of typing is played out under reset margin conditions, the WP typewriter, having reached the "hot zone," will either "decide" to start a new line, or pause so the operator can make a hyphenation decision.

HUNTING SERVICE
Hunting allows the records to be set up so that if one is in use, the originator is connected to the next one in a number series.

HYBRID
Term applied to certain jobs in a WP/AS system where the worker is a typing specialist for part of the time and an administrative aide the rest of the time.

HYPHEN DROP
When using an editing typewriter, if a hyphen

has been recorded to divide a word at the end of a line, that hyphen should not print if the word ever appears in the middle of a line in adjusted playback. Most units will perform this task automatically, but will retain required hyphens when so instructed.

I/O
Input/Output, is in "I/O terminal."

I/O UNIT
Input/Output device.

IPN
Information processing network.

IPS
Inches per second. Usually refers to speed of tape moving past a recorder head. Faster speeds generally produce higher fidelity.

IWP
Abbreviation for International Word Processing Association, a WP user group affiliate of the Administrative Management Society (AMS). An association concerned with the progress of word processing systems and methods.

IMPLEMENTATION
The phase following management approval of a WP system, during which the details of the system are developed and carried out.

INCENTIVE
Motivational technique used to improve office efficiency and productivity.

INDENT
To bring a line or lines of typing in from the margin, as at the start of a paragraph.

INDEX RETURN CODE
Functional code on a magnetic keyboard, (I/R).

INDEX SLIP
A strip of paper containing information about the contents of the recording (number of items, length of each item, and special corrections).

INK JET
A method by which alphanumerics are electronically "squirt printed" onto paper.

INPUT
(1) Information or ideas in raw form.
(2) Term used when referring to the submission of work to a word processing center.

INPUT PROCESSING EQUIPMENT
Dictation equipment used to input material to the word processing center.

INPUT UNIT
A device into which something is placed; e.g., a dictation recorder.

INPUT WP EQUIPMENT
Dictation equipment.

INTERACTIVE
Term applied to WP typing systems that communicate with computers or other WP terminals, in contrast to "standalone" systems which are self-contained.

INTERFACE
The point at which two systems connect.

JOB DESCRIPTION
A definition of what each worker should do. A written statement of the duties, responsibilities, and requirements of a specific job.

JOB ENLARGEMENT
A method of expanding an employee's basic duties by introducing more complex and varied procedures.

JOB ENRICHMENT
The opportunity for an employee to exercise more independence in his/her work through task assignments or delegation of authority.

JOB EVALUATION
The process by which jobs in an organization are appraised to determine their relative value to other jobs in same organization.

JOB LEVELS
The steps in a career path from entry level to the highest level.

JUSTIFICATION
The adjustment of a line of type so that it fills the line, flush from left to right, to a specified measure.

JUSTIFY
To type with flush margins on both sides of the text.

KEYBAR
Term applied to typewriters having conventional typebar or "basket" typing mechanisms.

KEYBOARDING
The act of operating a typewriter.

LPH
Lines of typing per hour. Unless specified, this should always refer to "net" lines of finished typing which is ready for final dispatch or disposition.

LSI
Large scale integration.

LEADING
Amount of space between lines of type, usually referred to in terms of "point" size. The notation "10/12" or "10 on 12" means 10-point type in a 12 point space, or, expressed another way, 10-point type with 2 points of "leading" between lines.

LEARNING CURVE
A measure of the rate of learning in relation to the length of training and/or experience.

LEVEL
Used in paper tape or magnetic tape jargon, refers to vertical rows of perforations or electronic codes.

LINE
A row of typing often used as a unit in work measurement. There is no universal standard, but one common definition fixes a "line" at 6 inches of

elite type (12 characters to the inch) or 72 typewritten strokes. Because "lines" could include rough drafts, etc., such statistics would be meaningless. Therefore, only "net" lines (those lines of finished typing ready for dispatch) are usually counted. Allowances are made for headings, endings, carbon copies and envelope addressing.

LINE COUNT

(1) Function on a Mag Card II which allows the technician to control a pre-determined number of lines to a page.

(2) Term given to a line of type when determining keyboard production.

(3) Term used to define keyboard production.

LOAD TRANSFER

A method of re-recording material from a continuous loop recorder onto a different medium.

LOCKOUT

A DE feature which insures that users will not be able to intrude on, or review, another person's dictation.

LOG

Term used for entering work flow information (in/out)—(author, amount, technician and turnaround time).

LOGGING

A method of recording, cataloging and/or filing incoming and outgoing work to assist in monitoring it and controlling its flow.

LOG SHEET

A document prepared and maintained by supervisors or WP operators to keep track of incoming and outgoing work, turnaround times, and the like.

LONGHAND

Writing in which words are written out in full by hand.

LOWER CASE

The small letters of type, in contrast to capitals or "upper case."

MC/ST

Magnetic Card Selectric Typewriter, an IBM product.

MS

(1) An alternative to the use of "Miss or Mrs." when neither of these is known or desired.

(2) Manuscript.

MT/SC

Magnetic Tape Selectric Composer.

MT/ST

Magnetic Tape Selectric Typewriter. These units are produced in several models, with a variety of options.

MACHINE SHORTHAND

A silent machine keyboarding system to rapidly record speeches, minutes, etc., at speeds up to 400 wpm. Uses 23 keys and numeral bar printing in all caps, on a continuous paper roll. Entire words can be keyboarded with a single stroke.

MACHINE TRANSCRIPTION

To make a typewritten copy of dictated material using a transcribing machine. The distinctive feature of machine transcription is that the typist works not from visual materials, such as shorthand notes, but directly from sound—from a recording of someone's else's voice.

MAG

Short form of the word "magnetic."

MAG CARD

Computer-sized plastic, magnetized media that is used to record on and playback from on magnetic keyboards (50 lines—5,000 character capacity).

MAG CARD EXEC.

Magnetic keyboard that incorporates proportional lettering for quality correspondence.

MAG CARD/MAG TAPE

Tape or card coated or impregnated with magnetic material on which information may be stored in the form of coded polarized spots.

MAG CARD II

Magnetic keyboard that incorporates the latest solid state technology.

MAGNETIC KEYBOARD

A device, commonly a WP typewriter, which records keystrokes and editing charges on a magnetic medium.

MAGNETIC KEYBOARD OUTPUT

Playback of previously recorded typing from magnetic tape or card initiated by an operator or prerecorded command.

MAGNETIC MEDIA

Any of a wide variety of belts, cards, disks, or tapes coated or impregnated with magnetic material, for use with appropriate WP equipment and on which dictation or keystrokes are recorded and stored.

MAGNETIC TAPE/SELECTRIC TYPEWRITER

(See MT/ST).

MAKE READY, DO, PUT AWAY

The basic components that make up every job: preparation for the job, and putting away materials after completing the job.

MANUAL SELECTOR

In telephone dictation, a connection method by which the handset is linked to an available recorder. The switching is done manually, in contrast to the "automatic selector" method.

MEASURE

(1) A line standard usually expressed in terms of character units.

(2) The unit value of line length.

MEASURED BACKSPACE

In DE, a transcriber feature which provides a controlled repeat of recorded dictation each time the foot pedal is depressed.

MEASURED REVIEW

Measured Backspace.

MEDIA
In general, the recording supplies, commonly magnetic-coated or of paper, used with WP equipment (see "magnetic media"). Common forms include paper tape, and magnetic belts, cards, disks, and tapes in cassettes or cartridges.

MEDIUM
(1) Singular form of the plural word "media."
(2) A paper or magnetic entity for recording used with a WP device.

MEMORY
Refers to a solid state computer buffer on Mag Card II/Memory Typewriter.

MEMORY TYPEWRITER
Non-media keyboard that incorporates most features and all of the technology developed for Mag Card II.

MERGE
To combine in an arrangement according to some rule.

MESSENGERS
Personnel who are trained to deliver mail and documents on an efficient and regular schedule between principal and the word processing center.

METHOD
The manner in which a particular job is accomplished.

MICROCASSETTE
Miniature cassette smaller than a minicassette.

MICROFICHE
Or "fiche," is a sheet of film containing multiple micro-images in a grid pattern. It usually contains identification information which can be read without magnification.

MICROFILM
(1) A fine-grain, high resolution film containing an image greatly reduced in size from the original.
(2) The recording of microphotographs on film.
(3) Raw film with characteristics as in (1).

MICROGRAPHICS
Combines the science, the art, and the technology by which information can be quickly reduced to the medium of microfilm, stored conveniently, and then easily retrieved for reference and use.

MINICASSETTE
Miniature cassette. Smaller than standard cassette but larger than microcassette.

MODE
The operating states of an automated unit. In WP typewriters, modes include "records" and "playback."

MODULE
An interchangeable plug-in item or other "Building Block" for expanding capacity.

MOONLIGHTERS
A slang term referring to those members of the workforce who hold two different jobs.

NWAM
Net Words A Minute.

NET DOCUMENTS
Number of pages typed excluding retypes.

NET LINES
Refers to "finished" lines of typing which are ready for dispatch or final disposition. Includes author corrections, also called "net output."

NONSELECTOR
In telephone dictation, a connection method which links various handsets to only one recorder. Thus, only one handset may access the recorder at any one time.

OCP
Optical Character Printing.

OCR
Optical character recognition, a form of data input employing optical scanning equipment.

OFFICE ENVIRONMENT
Refers to physical furniture, furnishings, and design of office.

OFFICE LANDSCAPE
A form of open-plan layout in which desks, files, screens, and plants are arrayed in non-rectilinear, free-standing clusters for reasons of better communication and easier rearrangement.

OFF-LINE
Operating a peripheral device independent of a central processor.

ONE-TO-ONE
The traditional office staffing concept of one secretary to one executive.

ONION SKIN PAPER
Lightweight stationery used to make carbon copies.

ON-LINE
Connected directly to a main processor through or by cable.

OPEN LANDSCAPE
Refers to office design in which there are no walls and partitions separating work areas.

ORGANIZATION CHART
Shows graphically the line of authority, span of control, and responsibility for work in each function or department.

OUTPUT
(1) The final results after recorded "input" is processed, revised, and printed out.
(2) The final documents or other information produced by an automated system.

OUTPUT UNIT
A device such as a transcriber for producing material.

OUTPUT WP EQUIPMENT
Automated typing systems.

PABX
Private automatic branch exchange, machinery which switches calls between the public telephone

network and inside extensions.

PBX
Private branch exchange. Loosely, a manned switchboard.

PERT
Project evaluation and review technique, a method for planning and controlling complex projects efficiently. Sometimes called the "critical path" method.

PAGE
Messenger.

PAGE CONTROL
A WP typewriter feature that causes pages to be numbered and ejected automatically during playout, thus reducing the need for human monitoring.

PAPER TAPE
A recording medium used by certain WP typewriters and photocomposition systems. Punched perforations carry the coding. Normally codes are recorded at 10 to the inch at a cost of approximately 3 cents per 1,000 characters.

PARAGRAPH INDENT
Standard measure of indention used to mark paragraphs or other indented material.

PATCH CORD
A wire or cable for connecting two pieces of audio equipment.

PATCHING
A method of transferring previously recorded material onto another medium.

PAUSE CONTROL
A control feature on some dictation recorders which enables the tape to be stopped temporarily without switching from the "play" or "record" settings.

PBX DICTATION SYSTEM
A central dictation system using telephone company wiring and dial or touch-tone telephones.

PERIPHERAL EQUIPMENT
(1) In DP and WP, accessory units which work in conjunction with a large central unit, but are not part of it.
(2) Units, such as I/O terminals, which work in conjunction with a major systems component, such as a CPU.

PHOTOCOMPOSITION
A form of "cold type" text production in which each character is exposed photographically on light-sensitive paper, which is then developed to became a reproduction-quality proof.

PHOTO ELECTRIC READER
A light sensing reader device used on tape driven power typewriters.

PICA
(1) The larger of two common typewriter typeface sizes, the smaller being "elite."
(2) A standard of typewriter spacing, 10 characters to the horizontal inch, also called "10 pitch."

PIN FEED
Term applied to typewriter platens having sprocket-like end pieces which help convey continuous forms through the unit.

PIN FEED PLATEN
Optional feature available for magnetic keyboards that accurately feeds continuous paper through the typewriter. Available in a variety of sizes.

PLAYBACK
(1) The process of listening to recorded dictation.
(2) The automatic typing out of recorded text.

POLICY
A definite course of action of a principle of procedure.

POWER KEYBOARD
A term referring to the family of automatic or text editing typewriter equipment.

POWER TYPING
(1) An application of magnetic media typewriters which increases productivity by allowing a typist to type at maximum or "rough-draft" speed without concern for errors. These are corrected by backspacing and retyping over the errors to produce a perfect recording on a magnetic tape cartridge from which an error-free document is automatically printed out.
(2) Automatic typing that is essentially repetitive and involving only minimal text editing.

PRECON TAPE
2 Program tape with standard instructions to condition composer and other systems to accept and obey keyboard or tape codes to achieve desired playback of final copy.

PREFIX
A coded signal to a WP typewriter console to accept a subsequent coded signal.

PREPARATION
Includes handling paper, loading the recording media, console preparation, and typewriter preparation (tabs, margins, margin resets), prior to typing.

PRERECORDED
Material stored on magnetic media for repetitive use, such as standard paragraphs or form letters. In a word processing system, it is one of the forms in which work is kept at a typing station.

PRINCIPAL
An individual within an organization who originates paperwork and requires secretarial support. An executive; a word originator.

PRINCIPAL-ORIENTED
Term applied to AS operations in which aides perform many tasks for a few specific individuals, as distinct from an "activity-oriented" arrangement in which aides handle a few specific tasks for many individuals.

PRINCIPAL-TO-SECRETARY RATIO
A numerical expression of the number of principals served by one secretary. A 4:1 ratio means one secretary serves four principals.

PRINTWHEEL
A typing element, daisy-like or cylindrical in shape, used on certain WP typewriters and printer units.

PROCEDURE
The step-by-step process for completing a particular job.

PROCEDURES MANUAL
Guide used by users of and technicians in a word processing center setting forth a step-by-step process for completing a particular job.

PROCESS TECHNICIAN
Title used for person involved in typing production on a magnetic keyboard in a word processing center.

PROGRAM
A set of machine instructions for the operation of automated equipment such as computers and WP typing systems.

PROGRAMMED SEARCH
The automatic finding of various segments of prerecorded material, or media, for playout in some predetermined sequence.

PROJECT EVALUATION AND REVIEW TECHNIQUE
(See "PERT")

PROOFREADING
Reading copy to detect and mark errors to be corrected.

PROPORTIONAL SPACING
A typewriter feature whereby alphanumeric characters are given horizontal spacing proportionate to their "natural" space requirements.

PUNCH
A device which punches holes into paper tape or cards in accord with a program. These holes are then usually sensed electronically with wire brushes, metal fingers or photocells into signals that represent alphanumerics.

PUNCHED PAPER TAPE
A strip of paper on which characters are represented by combinations of holes punched across the strip.

QUALITY CONTROL
A check on work to keep a uniform quality and appearance, always striving to standardize where possible.

QWERTY KEYBOARD
The current typewriter keyboard which remains unchanged since produced by Christopher Lathan Sholes in 1873. So named after the top left-hand row of alphabetic keys. This keyboard arrangement was specially designed to deliberately impede typing speed.

RAM
Random access memory.

RCR
Required Carrier Return.

ROM
Read-only memory.

RANDOM ACCESS
In DP and WP, a storage technique in which the time required to obtain information in memory is relatively independent of the location of the information most recently obtained. Disks are generally regarded as randomly accessible media, in contrast to tape, which is "serial."

RANDOM ASSEMBLY
A WP typewriter feature which eases the production of documents by automatically putting together parts from separately recorded material. Also called "programmed search."

READER
A projection device for viewing an enlarged microimage with the unaided eye.

READY TONE
The "talk-down" or "subjective" telephone tone which indicates to the user that he/she has "seized" a recorder and it is ready to accept his/her dictation.

RECORD
(1) To capture on a medium such things as the speech of dictation or the keystrokes entered into a WP typing system.
(2) To log data or other notations on a document, such as a business form, for purposes of control and evaluation.
(3) That which is written to perpetuate a knowledge of events.
(4) A document, form, or other paper containing information for the control of business operations.
(5) In general, any of the encoded media used in WP, such as belts, cards, and cassettes.

RECORDER
In a dictation system, the unit which transfers the dictation onto a medium.

REFERENCE CODE
(1) An electronically recorded magnetic tape indexing point.
(2) Loosely, any indexing signal, regardless of medium.

REPEAT CODE
Functional code that allows repetition of material previously played out.

REPETITIVE TYPING
Documents, such as form letters, that are typed over and over again usually for mass distribution.

REPROGRAPHICS
Refers to the reproduction and duplication of documents, written materials, drawings, designs by photocopy, offset printing, microfilming, office duplicating, etc.

RESPONSE TIME
The time a system takes to react to a given input.

REVERSE INDEX
Optional feature that allows indexing ½ line up or ½ line down. Used for superscripts or subscripts.

REVERSE SEARCH
Electronic searching in either direction for reference points on magnetic tape text editing typewriters.

REVISION CYCLE
Path of a typed document from initial keyboarding to final output.

REVISION WORK
The typing of corrections and editing changes at some point after the original keyboarding of a document, and also (usually) the final playout of that document.

RIPPLE
Term used to describe the ability of Mag Card II and the memory typewriter to playout at a predetermined automatic line length.

ROBOT TYPER
A unit which usually operates an electric typewriter from a "piano roll" device.

ROUGH DRAFT SPEED
Term used to describe the fastest speed that a center technician can type.

SAH
(1) Standard Average Hour.
(2) Standard Allowed Hours.

SP
One typewriter space.

SCANNING
(1) The rapid listening to recorded dictation to locate a specific part.
(2) Optical scanning; "OCR"; a form of data input in which an electronic device "reads" the marks or characters on a document.
(3) Function of Mag Card II that allows movement through total memory without printing until a stop code, page end code, or a line count is read.

SEALED SYSTEM
Usually used in reference to a continuous loop dictation recorder system.

SEARCH
The function of a WP typewriter in which specific material is located on a magnetic tape.

SECRETARIAL ACTIVITY
A composite of tasks involving basic support activities such as mail handling, filing, telephone answering, and typing.

SECRETARIAL SUPPORT CENTER
(1) A secretarial group performing all secretarial activities, including typing.
(2) In some contexts, an administrative center.

SECRETARY
(1) One entrusted with the secrets or confidences of a superior; one employed to handle correspondence and manage routine and detail work for a superior.
(2) In WP/AS systems, a title sometimes assigned, along with prefixes such as "WP" or "administrative," to the typing and AS specialists within the system.

SECRETARY, ADMINISTRATIVE
A specialist who supports principals with activities other than typing, such as mail handling, filing, phoning, and special projects. An AS aide.

SECRETARY, CORRESPONDENCE
An individual primarily responsible for transcribing dictation and producing documents on a WP typewriter; a WP operator.

SEIZE
To electronically connect with a dictation recorder.

SELECTOR
In private-wire DE systems, a device which connects the user's handset to the centralized recording equipment. See also "automatic selector," "manual selector," and "nonselector."

SELECTRIC
An IBM trademark applied both to the company's interchangeable "golf ball" typing elements and to the entire mechanical sub-assembly which activates the typing elements.

SELF-LOGGING
A worker's record of his or her own tasks and the time required to do them.

SHARED LOGIC
Term applied to a type of text editing system in which several keyboard terminals simultaneously use the memory and processing powers of a single CPU.

SHIELD
A piece of plastic or cardboard used to prevent smudges when erasing on original copies.

SHIFT
A typewriter key which activates the typing mechanism to print either in capitals or lowercase characters.

SHIFT KEY
A typewriter key which activates lowering or raising the type case to print in capitals or otherwise.

SHUTDOWN
After the originator has completed his/her dictation and hangs up, it takes anywhere from one minute to three and a half minutes for the connector to disconnect from the telephone line. The telephone company can adjust the length of shutdown time by installing a special feature called "calling party disconnect," which will significantly reduce the disconnect time. Shutdown can be a very important facet, depending upon the application for the recording and the volume of dictation.

SIMPLIFIED LETTER

Letter style created by the Administrative Management Society characterized by: (a) extreme block form with date at the top at the extreme left-hand margin, (b) name and address in block form for use with window envelope, (c) omission of formal salutation and complimentary close, and (d) simplified language and content of letter.

SIMULATION

(1) A management assessment technique in which mathematical "models" or formulas are used as test substitutes for real-life situations. (2) In the testing of DP programs, a technique in which specific software substitutes for the actual use of terminals and lines.

SINGLE ELEMENT

Term applied to a typing mechanism in which all print characters are contained on a single unit, such as a printwheel or Selectric "golf ball."

SKIP

A text-editing feature used in playback mode to "skip" or delete printout of a specific character, word, line, etc.

SLAVE

An output unit operating in parallel with and controlled by the coded tape or electronic signal of a master unit.

SOFTWARE

All materials needed to control and operate the "hardware" of an automated system, such as flowcharts, manuals, programs, routines, and the like.

SOUND-ON-SOUND

A method by which previously recorded material may be re-recorded while at the same time adding new material to it.

SOUND SHEETS

A flat, magnetic vinyl dictation recording medium.

SPAN OF CONTROL

Refers to the number of employees who are directly supervised by one person.

SPLIT KEYBOARDING

Keyboarding and editing on one unit and playing back on another.

SQUEAL

Noise caused by sticking and release of tape.

STAND-ALONE

Term applied to a WP typewriter or typing system that is self-contained, i.e., not connected to other systems or system components.

STANDARD

The time allowed an individual to satisfactorily complete an activity.

STATION

(1) The receptacle of a magnetic tape WP typewriter in which cartridges or cassettes are placed for recording and playback. More precisely, the record/playback drive mechanism of an editing typewriter; the MT/ST Model 4 has 2 stations. (2) In telecommunication, any of the input/output points in a system, such as an individual telephone extension or a teletypewriter terminal.

STAT TYPING

Priority typing.

STENOGRAPHER

A writer of shorthand; one employed chiefly to take and transcribe dictation.

STENOTYPE

A silent machine keyboarding system to rapidly record speeches, minutes, etc., at speeds up to 400 wpm. Uses 23 keys and numeral bar printing in all caps, on a continuous paper roll. Entire words can be keyboarded with a single stroke.

STOP

(1) A code recorded on a medium which instructs a WP typewriter to halt at some point during playback. (2) A WP typewriter key which, when hit, encodes stop instructions or halts action directly.

STOP CODE (SC)

Functional code on magnetic keyboards that when read will stop playback at that point to enable insertion of variable material.

STORABLE

The portion of a prerecorded document that is not subject to change. Examples are the format of a will or the body of form letters.

STROKE COUNTER

A device fitted on the typewriter that counts every key depression that is made. While this method is useful as a supplement to other methods, complete reliance on it demands very strict staff supervision for it is obviously easy to falsify results.

SUBJECTIVE TONE

A telephone "talk-down" tone signal which indicates to the user that he/she has "seized" a recorder and it is waiting to accept his/her dictation.

SUPERVISOR'S CONSOLE

Usually refers to a panel from which tank recorder dictation can be manually or automatically distributed.

SUPPORT REQUIREMENTS

The secretarial assistance required by a principal.

SWITCH, SWITCH CODE

An instruction to a two-station WP typewriter console to selectively play material from one medium and then switch to the second one and play.

SYSTEM

(1) A network of procedures designed to carry out an overall major activity. (2) The operations, procedures, personnel, and equipment through which a business activity is carried on.

TIS
Tone Input System. Telephone input processing system that utilizes either a touch-tone phone or a dial phone with a touch-tone pad or an individual input device to a central recording system.

TMC
Telephone Message Coupler. Interface equipment connecting recorders to telephone lines. Allows recording from any telephone in the world.

T/S
Time Sharing.

T/W
Typewriter.

TWX
Teletypewriter exchange service.

TAB
(1) Short for "tabulator," the typewriter key which controls space indentation.
(2) The act of operating the tab key.
(3) Predetermined indention.
(4) Term applied to typing work involving heavy tabulation, such as statistical work or multicolumned text.
(5) In DE, sometimes a reference to the indexing slip on a recorder.

TAB GRID
Preset series of indentions (e.g. every 5 spaces).

TALK-DOWN TONE
In telephone dictation, a whistle-like tone which tells the user that he/she has "seized" a recorder and that it is ready to take his/her dictation; also reminds users to speak up when dictating. A "subjective" tone.

TANK RECORDER
An endless loop dictation system.

TASK
(1) An assigned piece of work.
(2) The jobs, duties, or responsibilities of a worker.

TASK DATA SHEET
A record of jobs by time period during a single work day.

TASK LIST
A detailed record of each type of work performed by each worker and the average number of hours spent performing it per week.

TECH III RIBBON
Advanced carbon film ribbon developed by IBM that reduces ribbon changes on the magnetic keyboard used in conjunction with a coverup tape.

TELEPHONE MESSAGE COUPLER
Interface equipment which connects DE to telephone lines and allows recording from any telephone in the world. The term is loosely interchangeable with "recorder coupler" and "trunk link."

TELEPROCESSING
A form of information handling in which a WP or DP system utilizes communication facilities.

TELETYPE
Trademark of Teletype Corp., usually applied to a series of different teleprinter units such as tape punches, reperforators, page printers, and keyboard terminals used in hard-copy communication systems.

TELETYPEWRITER
Generic term for teleprinters and keyboard terminals used in hard-copy communication systems, but distinct from communicating WP typewriters, which possess a wide range of text-editing capabilities not found in teletypewriters.

TELETYPEWRITER EXCHANGE SERVICE
A public, switched service of Western Union in which suitably arranged teletypewriter stations are provided with lines to a central office for access to other such stations throughout the United States, Canada, and Mexico. Abbreviation: "TWX."

TELEX
A dial-up teleprinter service of Western Union comparable to TWX, but with separate rates and certain operating differences, which enables subscribers to communicate directly and temporarily among themselves, and also with TWX users, throughout the United States, Canada, and Mexico.

TEN-PITCH
Term applied to typewriter spacing of 10 characters per horizontal inch. Also knows as "pica" spacing.

TERMINAL
(1) Any device capable of serding and/or receiving information over a communications channel.
(2) In DP and WP, an I/O device.
(3) In WP, often a reference to a communicating typewriter.

TEXT
(1) The actual matter of an author's work.
(2) The main body of matter on a typed or printed page, as distinct from illustrations and marginal matter.
(3) Broadly, the output of a WP system.

TEXT EDITING
An application of magnetic media typewriters which speeds retyping of revised texts. The typist keyboards only new material and instructs the machine to skip unwanted text already recorded. The revised document is then played out automatically from the magnetic tape cartridge or other media.

TEXT EDITING TYPEWRITER
A WP typewriter; one that records or "captures" keystrokes on a medium, and that has the ability to make additions, deletions, corrections, and format changes in the recorded text prior to automatic playout of finished documents. Text editing typewriters may be either "interactive" or "stand-alone."

TEXTVERARBEITUNG
A German term for text processing.

THESAURUS
A dictionary of synonyms and antonyms.

THROUGHPUT
The complicated cycle of a document from thought origination through typing and distribution.

TIME SHARING
Splitting personnel or equipment, according to need, in two or more areas.

TONE CONTROL
A DE feature used to vary treble and bass response during playback.

TOUCH CONTROL
A device which adjusts the pressure of a typewriter keyboard to suit the operator.

TOUCH-TONE
A Bell System trademark applied to the 10-key panel on a push-button phone.

TOUCH TYPING
The skill of typing without looking at the keys.

TRACK
The path on magnetic tape or card along which a single channel of sound or codes is recorded.

TRADITIONAL SECRETARY
A pre-WP secretary; one employed as a general-purpose assistant to an executive, to handle his/her correspondence, phone calls, errands, and other random tasks, in contrast to an "administrative" or "correspondence secretary."

TRANSCRIBE
To convert recorded dictation into a typed document or other form of hard copy.

TRANSCRIPTION
Making a written copy of dictated or recorded matter in longhand or on a typewriter.

TRANSCRIPTIONIST
One who transcribes dictated or recorded material; a correspondence secretary or WP operator.

TRANSFER
To copy material from one medium to another.

TRANSPORT
The mechanism that moves or "drives" a recording medium in DE or WP equipment.

TRUNK
Telephone line.

TRUNK LINK
A type of interface system which permits phone-company telephones to "give instruction" to centralized dictation equipment, by converting rotary (dial) or Touch-Tone signals into commands such as "record" and "play back."

TUNING
Magnetic belt dictation transcriber term referring to alignment of transcription head to correspond with the track made up by recorder dictation head.

TURNAROUND TIME
Elapsed time between dispatch and receipt of material back at the starting point.

TURNOVER
Refers to the frequency of replacing employees.

TWELVE-PITCH
Term applied to typewriter spacing of 12 characters per horizontal inch. Also known as "elite" spacing.

TYPEBAR
(1) Term applied to typewriters having conventional "basket" typing mechanisms, with one capital and lower-case character-pair per keybar. (2) An individual typing element in the basketed set.

TYPEWRITER BUTTON
Mode Button on Mag Card II or Memory Typewriter that allows activation or deactivation of the memory.

TYPEWRITER SPACING
Term used to describe the vertical format of six lines to an inch on a standard spacing keyboard.

TYPING ELEMENT
The unit which produces a character or characters of typing by striking on paper through an inked ribbon. Individual typebars, printwheels, and Selectric "golf balls" are all typing elements.

TYPING MECHANISM
Generally the subassembly within a typewriter that includes both the typing element (or elements) and the linkages which position and power its (their) strike.

TYPING STATION
An individual work station at which documents are typed.

TYPIST
One who operates a typewriter.

UNAFFECTED CORRESPONDENCE
Correspondence expressed in hours of work, which will not be completed on magnetic keyboard equipment for WP/AS record-keeping purposes, such hours are consider AS hours.

UNDERSCORING
In WP typewriters, the automatic underlining of designated words and phrases.

UNDERSTAFFING
Providing for fewer employees than necessary to handle a given workload.

UNIT
In proportionally spaced typing, an arbitrary size value assigned to every character.

UNIT SETS
Preassembled packets with interleaved one-time carbons, or carbonless paper.

UNLOADING
The act of rewinding a magnetic tape and re-

moving it from a WP typewriter.

UPPER CASE
(1) The capital letters of type, in contrast to small letters or "lower case."
(2) Typing done all in capital letters.

USER'S MANUAL
A book of instructions issued to word originators outlining procedures for proper dictation, and setting forth other document, style and WP standards used in the organization.

UTILITY SPECIALIST
Title used for person totally trained on all functions performed in a word processing center and designated as supervisory backup.

UTILITY TYPING
Short, out-of-the-ordinary typing tasks not sent to the WP center, but handled more or less informally by AS personnel.

VSC
Variable speed control. Used in voice compression machines

VU METER
Volume unit meter used in recorders. Indicates audio-frequency levels. Generally used to monitor recording levels to maintain them within the distortion limits of the tape.

VARIABLE
A segment of a prerecorded document that is subject to change. Examples would be the name and address listings that are merged with form letters, or the specific information that is merged to produce a complete will or other legal document.

VARITYPER
A direct impression composition device. Type sizes generally range from 6 to 12 points.

VELOCITY
Speed and force at which the typing element strikes the platen.

VOICE BANK
A recorder system whereby spoken material can be stored and easily accessed for reference.

VOICE COMPRESSION
A device that compresses speech into a shorter time interval than the original recording.

VOICE GUARD
A DE feature which sends a loud, steady tone over the phone if the recording medium is not moving.

VOICE OPERATED RELAY
A device in central dictation systems which activates the recorder when it senses that voice sounds are coming over the line, and stops the process when only silence fills the line. The "VOR" thus eliminates long pauses during playback and transcription.

WATS
Wide Area Telephone Service; a U.S. telephone company service which permits a customer to dial an unlimited number of calls in a specific area for a flat monthly charge.

WOW
In DE, a relatively slow, periodic variation in tape speed affecting pitch.

WP/AS
Word processing and administrative support.

WPC
Word processing center.

WPM
Words per minute.

WINDOW ENVELOPES
Envelopes designed so that the inside address of the letter appears through the window and the envelope does not need to be addressed.

WORD COUNT
A count of the volume of work of an employee.

WORD ORIGINATOR
(1) A principal; an executive.
(2) A person who dictates "copy" for transcription into final documents.
(3) In general, an individual within an organization who originates paperwork and requires secretarial support.

WORD PROCESSING
Word processing is a method of producing written communication at top speed, with the greatest accuracy, the least effort and the lowest possible cost—through the combined use of proper procedures, automated business equipment and trained personnel.

WORD PROCESSING CENTER
(1) The room or area housing equipment and personnel for the production of typed documents.
(2) The centralized location in which WP operations take place.

WORD PROCESSING SYSTEM
The combination of specific procedures, methods, equipment, and people designed to accomplish the transition of a written, verbal or recorded word and distributed to its ultimate user.

WORD PROCESSING SYSTEMS MANAGER
The individual who has responsibility for conducting a word processing study and implementing and managing the word processing system.

WORD PROCESSING TYPEWRITER
A text editing typewriter; one that records or "captures" keystrokes on a medium, and that has the ability to make additions, deletions, corrections, and format changes in the recorded text prior to automatic playout of finished documents. WP typewriters may be either "interactive" or "stand-alone."

WORDS
Commercial schools usually express typing speeds in "words," a word being 5 strokes (periods and spaces), so that a person typing 40 words per minute is considered to have struck 200 char-

acters in one minute. It is not considered a suitable measurement.

WORKSTATION

(1) An identifiable work area for one person.

(2) In an office, a desk and the associated furnishings required for a worker to accomplish his/her assigned responsibilities.

WRITING LINE

The maximum horizontal space within which a typewriter will print.

APPENDIX C

FORMS USED IN WORD PROCESSING CENTERS

The following forms are those used by the Word Processing Center of the Corporate Offices of Montgomery Ward, Chicago, Illinois. These forms serve as an example of the type of forms used in word processing offices.

FORM NUMBER	DESCRIPTION
1	Gives a yearly picture of each Word Processing Secretary's performance
2	Secretarial Report submitted monthly listing all secretaries by Mini Center
3	Departmental Report submitted monthly showing volume received by each Mini Center
4	Recap sheet of each Mini Center in the Corporate Office. Same form would be used for Merchandise Building and our State Street location
5	Buck slip used to send completed work to its user. We do this by hourly messenger service.
6	Document Control Sheet completed by the Group Leader for each job coming into the Center. Lower part of form is then completed by Word Processing secretary when work is given to her and when she completed it.
7	Status Report completed by the Group Leader and submitted to the Supervisor by 9:00 A.M. each working day. Gives the Supervisor a good picture of each Center's status.
8	Attendance record submitted with the monthly report showing amount of time off taken by each secretary for that month. Helps us prepare for next year's popular months for taking vacation time.
9	Overtime record submitted with the monthly report showing total amount of overtime for that month. Helps us prepare for next year's budget along with understaffing or critical areas.
10	Weekly Error Report gives an actual number of errors per secretary.
11	Project follow-up for each Group Leader to see if she/he has completed all projects assigned to them. Helps groom them for their next step which is being a Supervisor.

Form #1

SECRETARIAL HISTORY

SECRETARY'S NAME _____

MINI # _____

FLOOR # _____

MONTH	TOTAL NO OF LINES	DAYS PRESENT	AVG LINES	CENT REV	CENT %	COMMENTS
January '76						
February '76						
March '76						
April '76						
May '76						
June '76						
July '76						
August '76						
September '76						
October '76						
November '76						
December '76						
TOTAL						

Form #2

SECRETARIAL HISTORY

MONTH _____ 197____

SECRETARY NAME	GROSS LINES	CENT REV.	% REV.	NET LINES	DAYS PRES.	AVG LINES
TOTAL						

Form #3

DEPARTMENT HISTORY

MINI # _____

MONTH _____ 197____

DEPARTMENT	GROSS LINES	STAN LINES	OTHER LINES	CENT REV	% REV	NET LINES
4th FLOOR						
AUDIO VISUAL						
CUSTOMER RELATIONS						
CUSTOMER SERVICE						
EEO						
EMP. BENEFITS						
ORG. PLANNING						
PERSONNEL						
TOTAL						
5th FLOOR						
CORP. PACK & DESIGN						
GENERAL DIST.						
TRANS. CLAIMS						
TOTAL						
9th FLOOR						
CORPORATE SYSTEMS						
TOTAL						
11th FLOOR						
CORPORATE SYSTEMS						
CORPORATE COMMUNICATIONS						
TOTAL						

DEPARTMENT HISTORY

MINI # _____

MONTH _____ 197____

DEPARTMENT	GROSS LINES	STAN LINES	OTHER LINES	CENT REV	% REV	NET LINES
[illegible] FLOOR						
ADMIN. SERVICE						
MS./PROTECTION						
LICENSED DEPTS.						
GENERAL PURCH.						
STOCK TRANSFER						
TOTAL						
15th FLOOR						
CORP. RESEARCH						
SIGNATURE AGENCY						
TOTAL						
18th FLOOR						
CORPORATE PLANNING						
CORPORATE TRAINING						
RETAIL MECHANIZED MERCH.						
STORE PLANNING						
TOTAL						

DEPARTMENT HISTORY

MINI # _____ MONTH _____ 197 ___

DEPARTMENT	GROSS LINES	STAN LINES	OTHER LINES	CENT REV	% REV	NET LINES
19th FLOOR						
AUDITING						
CAT. OPERATIONS						
LABOR RELATIONS						
PUBLIC RELATIONS						
TOTAL						
21st FLOOR						
ACCOUNTING						
CORP. FACILITIES						
CREDIT						
TAX						
TOTAL						
25th FLOOR						
CONTRACT INSTALL						
CORPORATE BUDGET						
EXECUTIVE SUITE						
FOOD SERVICES						
MW CREDIT CORP						
RETAIL OPERATIONS						
TREASURER						
TOTAL						
TOTAL						

Form #6

MONTGOMERY WARD

DOC. CONTROL # _____ AUTHOR _____ DEPT _____

TIME IN ___/___ TIME DUE ___/___ ☐ RUSH

☐ BELT ☐ COPY ☐ FORM ☐ TAPE

☐ REVISION ☐ EXTENDED RETENTION ☐ PERMANENT RETENTION

SPECIAL INSTRUCTIONS _____

GROUP 1 2 3 4 5

SECRETARY NAME _____ START ___/___ FINISH ___/___

MEDIA CARD NO. _____ TAPE NO. _____ REF. NO. _____ ERASE _____

MARGIN 15-90 ☐ OTHER _____ TABS GRID ☐ OTHER _____

TIME OUT ___/___ LINES _____

MW 5280

MONTGOMERY WARD

DOC. CONTROL # _____ AUTHOR _____ DEPT _____

TIME IN ___/___ TIME DUE ___/___ ☐ RUSH

☐ BELT ☐ COPY ☐ FORM ☐ TAPE

☐ REVISION ☐ EXTENDED RETENTION ☐ PERMANENT RETENTION

SPECIAL INSTRUCTIONS _____

GROUP 1 2 3 4 5

SECRETARY NAME _____ START ___/___ FINISH ___/___

MEDIA CARD NO. _____ TAPE NO. _____ REF. NO. _____ ERASE _____

MARGIN 15-90 ☐ OTHER _____ TABS GRID ☐ OTHER _____

TIME OUT ___/___ LINES _____

MW 5280

MONTGOMERY WARD

DOC. CONTROL # _____ AUTHOR _____ DEPT _____

TIME IN ___/___ TIME DUE ___/___ ☐ RUSH

☐ BELT ☐ COPY ☐ FORM ☐ TAPE

☐ REVISION ☐ EXTENDED RETENTION ☐ PERMANENT RETENTION

SPECIAL INSTRUCTIONS _____

GROUP 1 2 3 4 5

SECRETARY NAME _____ START ___/___ FINISH ___/___

MEDIA CARD NO. _____ TAPE NO. _____ REF. NO. _____ ERASE _____

MARGIN 15-90 ☐ OTHER _____ TABS GRID ☐ OTHER _____

TIME OUT ___/___ LINES _____

MW 5280

RECAP OF LINES

Form #4

☐ Merchandising Building Acct. # _____ ☐ Corporate Office

_____ 197 ___

MINI CENTER	GROSS LINES	STAN LINES	OTHER LINES	CENTER ERROR	% OF CENTER ERROR	NO. OF SECRETARIES	AVERAGE
TOTAL							

Form #5

_____ (author)

_____ (department)

_____ (location)

I have completed your work according to instructions. If changes or corrections are necessary, please refer to:

DOCUMENT CONTROL NUMBER _____

MEDIA NUMBER _____

SECRETARY _____

If this material has not been returned to the Center before _____ we will assume the work was satisfactory and will erase it from our media. If you feel more time is necessary, please contact the Center Supervisor, immediately.

CAN WE IMPROVE?

PLEASE TELL US ABOUT IT!

Form #7

WORD PROCESSING STATUS REPORT

CENTER LOCATION _____ CENTER PHONE EXTENSION _____

CENTER GROUP LEADER _____

SECRETARIES PRESENT _____ SECRETARIES OUT _____

NAMES OF SECRETARIES OUT (Please give Timecard Code for reason) TOTAL DAYS OFF IN LAST 6 MONTHS

_____ _____

_____ _____

_____ _____

LETTERS & MEMOS (1 to 4 typewritten pages)

Average Turnaround Time _____
Number of Jobs to be Done _____
Number of Rushes _____
Number of Jobs over SIX hours old in Center _____

PLEASE LIST BELOW (OR USE BACK OF REPORT) A BRIEF DESCRIPTION OF WORK OVER SIX HOURS OLD AND THE REASON WHY IT IS LATE

DESCRIPTION REASON

MULTI PAGE (5 to 10 typewritten pages)

Average Turnaround Time _____
Number of Jobs to be Done _____
Number of Rushes _____

SINCE THE AVERAGE TURNAROUND TIME FOR THIS TYPE OF WORK IS USUALLY SIX TO EIGHT HOURS, PLEASE GIVE A BRIEF DESCRIPTION OF WORK EXCEEDING THIS TIME BY TWO HOURS.

DESCRIPTION REASON

PROJECTS (10 or more typewritten pages)

Average Turnaround Time _____
Number of Jobs to be Done _____
Number of Rushes _____

SINCE PROJECTS ARE HANDLED ON A COMPROMISED TIME BETWEEN THE GROUP LEADER AND THE USER, PLEASE GIVE A BRIEF DESCRIPTION OF ANY WORK THAT WILL NOT MEET THE DEADLINE AGREED UPON.

DESCRIPTION REASON

COULD HELP A CENTER _____
NEED HELP _____

COMMENTS _____

Form #9

W.P.C. Overtime Hours

_____ 197_

Secretary's Name	# of Overtime Hours	Reason For Overtime
TOTAL		

Form #8

_____ 197 ___ Account No _____

Secretary's Name	Paid Sick Days	Unpaid Sick Days	Vacation Days	Anniversary Day	Personal Holiday	Requested Time

Form #10

WORD PROCESSING
WEEKLY ERROR REPORT

Mini Center Location _____ Week of _____

Secretary's Name	Number of Jobs Completed	Number of Errors	Number of Errors Last Week	Difference Inc./(Dec.)

NUMBER OF ERRORS SHOULD NOT BE THE LINECOUNT OF ERRORS AS SHOWN ON YOUR MONTHLY REPORT. THEY SHOULD BE THE ACTUAL NUMBER OF ERRORS TYPED ON ALL DOCUMENTS FOR THAT WEEK. IF A SECRETARY DID 10,000 LINES FOR THIS WEEK BUT HAD 5 ACTUAL TYPOS FOR THAT SAME WEEK, THE NUMBER YOU WILL INSERT FOR THIS REPORT WILL BE 5. PLEASE CONTINUE KEEPING A LINECOUNT OF ALL PAGES WHERE THESE 5 TYPOS APPEARED FOR YOUR MONTHLY REPORT.

Form #11

WPC SPECIALIST _____

Date: _____

Project Assigned: _____

_____

_____

_____

_____

Date Assigned: _____

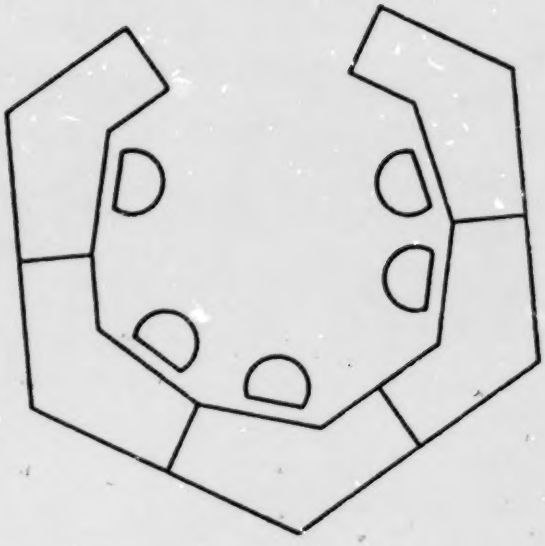
Due Date: _____

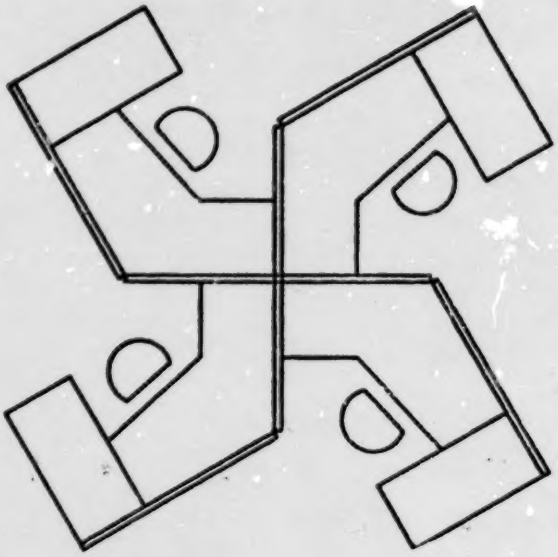
Date Turned In: _____

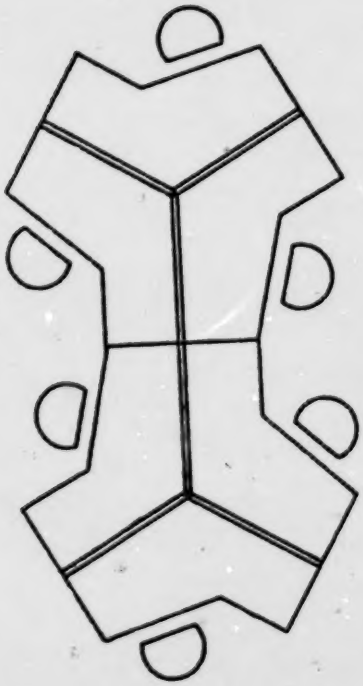
Reaction: _____

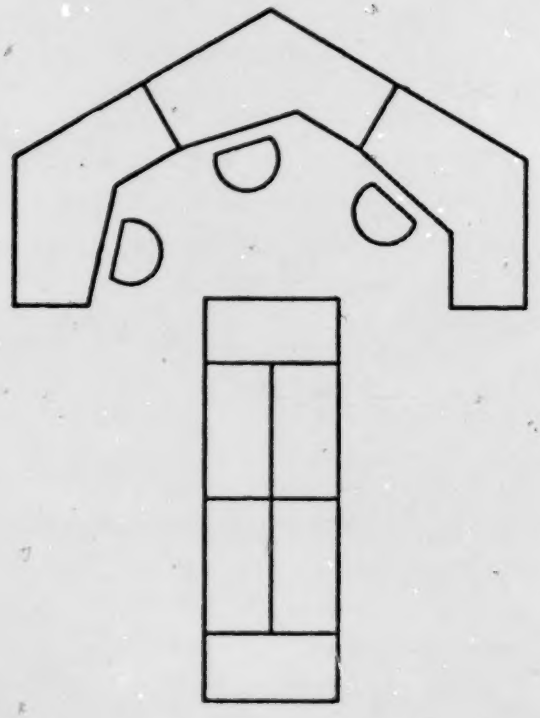
APPENDIX D

CLUSTER LAYOUTS OF WORD PROCESSING FACILITIES









APPENDIX E

SELF-INVENTORY FOR WORD PROCESSING TEACHERS

This self-assessment provides teachers the opportunity to rate themselves on their level of word processing involvement.

Check one response for each item:

Have you

	You have done it. (1 point)	Has it changed what is going on in your head? (2 points)	Has it changed what you do in the classroom? (3 points)
1. Read an article on word processing?			
2. Visited an office and talked with a word processing secretary?			
3. Talked with sales personnel concerning word processing equipment?			
4. Visited a word processing vendor's office?			
5. Sent for a complimentary copy of a word processing textbook?			
6. Read the word processing section in a management guide such as OFFICE MANAGEMENT HANDBOOK?			
7. Attended a session on word processing at a professional meeting?			
8. Attended a workshop on word processing?			
9. Enrolled and completed a graduate course on word processing?			
10. Had your school subscribe to a word processing magazine?			
11. Discussed word processing with a colleague?			

	Yes	No
12. Completed a follow up of your recent graduates to determine the types of office positions they are holding?	(2 pts.)	
13. Attempted to establish a work station for your students in offices that have word processing centers?	(3 pts.)	
14. Invited or appointed a word processing secretary to your office occupations advisory committee?	(3 pts.)	
15. Analyzed the resources within your school for incorporating word processing at any level?	(1 pt.)	
16. Integrated word processing activities into your existing courses?	(2 pts.)	
17. Developed and implemented a new course on word processing?	(2 pts.)	
18. Developed a total new curriculum for preparing word processing secretaries?	(3 pts.)	
19. Worked in a word processing center full time or for just a short period of time?	(3 pts.)	

Can you	Yes	No
20. Give a definition of word processing?	(2 pts.)	
21. Identify the five phases of word processing?	(3 pts.)	
22. Identify possible job titles used in word processing environments?	(1 pt.)	
23. Identify possible career paths for correspondence and/or administrative word processing secretaries?	(2 pts.)	
24. Explain differences between a social office and word processing office?	(2 pts.)	
25. Identify the time and cost factors involved in processing words?	(3 pts.)	
26. Identify at least ten competencies needed by correspondence and/or administrative word processing secretaries?	(5 pts.)	
27. Develop a specific word processing learning activity?	(4 pts.)	

Total the points awarded for each response and determine your career level as a word processing teacher.

Points	*Career Level for Word Processing Teaching*
60 – 74	Master teacher—on the way to becoming the master professional word processing teacher.
31 – 59	Associate teacher—well enough involved in word processing to become a master teacher in a short time.
1 – 30	Apprentice teacher—learning the what of word processing and how to teach it.

APPENDIX F

Developing Competencies into Performance Objectives

Competencies for word processing personnel are given in Part III. These competencies can be developed into specific performance objectives, stating a measurable behavior, the product to result from the performance, the conditions under which the performance will be conducted, and the standard on which the performance is to be judged.

These steps should be completed in writing the performance objective:

1. Identify the behavior and select a verb describing the behavior.
2. Determine what is to result from the performance—a product created or a process to be observed.
3. Select the conditions under which the performance is to take place.
4. Decide on the standard (level) against which performance will be evaluated.

Five word processing competencies have been developed into performance objectives in this example:

Competency	*Result of Performance* *Product*	*Process*	*Verb*	*Conditions of Performance*	*Standard*
1. Accurately arrange and rapidly produce all types of office correspondence and reports	letters and envelopes form letters manuscript tabulation		Demonstrate	Given a project requiring the typing of office correspondence	All completed within one hour with no more than one unmailable item
2. Accurately and quickly research information using a variety of sources	Short 10-answer test		Demonstrate	Given access to a dictionary, procedures manual, *Office* magazine, *World Almanac* and *Books of Facts*, and *Yellow Pages*	No errors in 30 minutes
3. Use appropriate telephone techniques	Evaluation forms completed by group	observation of student performance	Demonstrate	Given five problem situations in which two students, using classroom equipment, initiate and receive business telephone calls, record names and numbers given in a conversation, record and deliver messages, transfer calls to more appropriate person, and locate business services in the *Yellow Pages*	Group evaluation using written criteria that have been developed through group discussion
4. Determine the purpose of using copying versus duplicating processes	Answers to ten problem situations		Decide	Given ten problem situations involving choices of copying processes and choices of duplicating processes	Nine answers correct
5. Exhibit toleration of routine work	Criteria sheet for controlled observation	Observation in simulated or real office	Demonstrate	While being observed by teacher with no forewarning as routine tasks are performed	Without complaining

(Adapted from Popham, Schrag, and Blockhus, A Teaching-Learning System for Business Education, Gregg Division, McGraw-Hill Book Company, 1975.)

Sample performance objectives for the five competencies would then be:

1. Given a project requiring the typing of letters and envelopes, tabulations, manuscript from rough draft, and fill-ins on form letters, the student will demonstrate an ability to plan and type three 100-word arranged letters and envelopes, fill in addresses and salutations on ten form letters, type a one-page manuscript from rough draft, and type a five-line three-column tabulation without columnar headings within one hour with no more than one unmailable item.
2. Given access to a dictionary, procedures manual, THE OFFICE magazine, WORLD ALMANAC AND BOOKS OF FACTS, and YELLOW PAGES, the student will demonstrate the ability to locate answers to ten questions with no errors in 30 minutes.
3. Given five problem situations in which two

students, using classroom equipment, initiate and receive business telephone calls, the students will demonstrate the ability to place and answer calls, terminate the calls, record names and numbers given in a conversation, record and deliver messages, transfer calls to a more appropriate person and locate business services in the YELLOW PAGES. Evaluation will be done by the group after written criteria has been developed through group discussion.

4. Given ten problem situations involving choices of copying processes and choices of duplicating processes, the student will decide which process to use, defending the decision in an essay, having nine correct responses.
5. While being observed by the teacher using a criterion sheet and with no forewarning, the student will demonstrate a tolerance for routine work by not obviously complaining about the work.

(Adapted from Popham, Schrag, and Blockhus, *A Teacher-Learning System for Business Education*, Gregg Division, McGraw-Hill Book Company, 1975.)

APPENDIX G

The format that follows is suggested for use by anyone wishing to initiate a course or total program for word processing.

General Information

Proposal Prepared by _____
Date _____
School _____
Department _____
Proposed Course or Program Title _____
To Be Offered at Grade Levels _____
One or Two Semesters/Quarters _____
Student Prerequisites _____

Rationale

(Sample narrative to include)

The importance and need for word processing in the business world is becoming increasingly evident. Numerous literature articles stress the great need for qualified personnel and the necessary role of the educational institutions in training to meet this demand (support with a bibliography listing recent periodical articles).

Paperwork in offices has increased overwhelmingly. A generation ago, there was one office employee for every twenty production workers.

Today, there is one office worker for every five production workers. Blue collar workers have doubled their output in the last 20 years and now operate at 85 percent efficiency. White collar workers operate at 35 percent efficiency. Employers had few alternatives, other than hiring additional people, to increasing paperwork output. In order to solve this problem, a systematic approach, which is word processing, was developed. Since companies started developing word processing systems, studies show that word processing has saved approximately 25 percent on paperwork costs. This is an indication offices will be needing more and more trained personnel.

According to some researchers, the word processing industry has grown nearly 40 percent a year since 1970, others see it striding along at a 20 percent rate through 1980. Word processing users, too, while aware that they are still in the early stages of their profession, know that they are onto something bigger for the future.

(Complete with local data) Local need is evidenced by a survey conducted last semester in this area. Forty-one firms were surveyed and 34 percent indicated some form of word processing is being used in their firm. The last two years have shown an even greater growth in automatic typing equipment sales so this figure is now much higher. This study confirmed that the local business community has entered the word processing domain and that business education curricula should reflect the employment needs of the community and prepare students to meet job opportunities that exist there. Beginning workers now have a choice of career paths and goals unheard of six years ago.

Follow-up studies of recent graduates indicate that a number of those completing the office education programs are now working in word processing situations.

What heights the total word processing industry will attain in the 1980's and beyond depends, of course, on what bounds are put around the term "Word Processing Industry." With word processing equipment already interacting with computers, photocomposers, and telecommunication gear, this "other" equipment could, even now, be partly encompassed in the word processing term. As multimedia systems evolve, they would fuse word processing, data processing, reprographics, microfilm, facsimile, and other telecommunication's technology into one Information Support Service.

Educational institutions must offer the instruction and programs needed to prepare personnel for the office of the 1980's.

Description of Proposed Course or Program
Goals of Proposed Course or Program
Plan of Instruction

Content of Proposed Course or Program:

Examples of Performance Objectives to be Implemented:

Examples of Learning Activities:

Learning Materials, Equipment, and Facilities Needed for Course or Program And Summary of Costs Involved

Learning Materials: Cost:

Equipment: Cost:

Facilities: Cost:

Summary of Costs:

Personnel and Professional Growth Activities

Personnel Needed:

Professional Growth Activities:

Plan for Student Evaluation and Course or Program Evaluation

Student Evaluation:

Course or Program Evaluation:

APPENDIX H

Utilizing Community Resources and Advisory Councils

Community resources need to be utilized to provide a successful word processing education program. A close relationship between office educators and word processing personnel can be developed in a variety of ways.

Graduate File. Graduates of your program can be utilized as community resource people. Information concerning the types of jobs, location of their offices, etc., can be kept on file. Faculty and students can then contact these former students for information concerning careers.

Evening Students. Particularly in community colleges, there are a number of adult students taking courses such as CPS Review, who could be tapped as resource people.

Office Visits. Not the massive group invasion, but individual students or pairs of students could be assigned to interview and visit with graduates or evening students on their jobs. In some offices with word processing, it is difficult for large groups of students to be taken through administrative secretarial areas. This one-to-one approach can result in greater student insight into conditions in the office.

Teacher Internships. If full-time employment is not possible, arrange to spend several days working along side employees in offices with word processing.

Professional Groups. Join professional organizations such as the National Secretaries Association, American Management Association, or a word processing association if one is located in your area. Contact with business people, and awareness of their concerns and problems can add a great deal to word processing instruction.

Professional Literature. Reading may not provide the realism of experience, but it does provide a wide exposure to issues and current information. Periodicals provide up-to-date information not available in textbooks. AND, many of these periodicals can be obtained without cost. *(The Office, Modern Office Procedures,* and *Word Processing).*

Advisory Committees

A Word Processing Advisory Committee should be selected to give advice concerning word processing education at any level of instruction. The members should be predominately from outside the field of education and should be selected because of their specialized knowledge about word processing.

The Advisory Committee can assist in doing such things as:

1. Determining community needs in education for word processing.
2. Assisting in the preparation and selection of course materials by establishing need for a course, by reviewing present course outlines and texts used, by suggesting revisions or additions, and by reviewing objectives.
3. Evaluating the word processing program by
   a. Advising whether a program is providing the kind of training required in word processing situations.
   b. Reviewing curriculum and objectives of program.
   c. Reviewing adult classes.
   d. Securing opinions from business people.
   e. Reviewing all features of the program including the various forms used.
4. Helping select instructors and resource speakers for the program.
5. Assisting in conducting surveys.
6. Helping to provide continuity of instruction.
7. Providing support by setting up scholarships or awards for honor students, by supporting school administration for local appropriations, and by supporting state and federal legislation affecting vocational education.
8. Providing public relations service within the community.
9. Helping select and place students in cooperative programs with word processing centers in businesses.
10. Recommending policies for the cooperative program, i.e., minimum wages to be paid, regulations for employment of students, type of students to be selected, and evaluation of students.
11. Assisting in securing equipment and other facilities for the word processing program.
12. Helping to plan special events.

APPENDIX I

DECISION-MAKING GUIDE FOR PURCHASING WORD PROCESSING EQUIPMENT

EQUIPMENT ITEM: _____

	FACTORS	VALUE (1-2-3)	×	RATING (1-10)	=	SCORE
	1. Reputation of manufacturers					
	2. Cost of equipment					
	3. Use in offices (extent and applications)					
	4. Dependability and availability of service					
	5. Learning support material					
	6. Learning time (Number of students served)					
	7. Learning objectives					
	8. Trade-in value					
	9. Future technical changes					
OTHER	10.					
OTHER	11.					
OTHER	12.					
				TOTAL		

FORMULA FOR DETERMINING WORD PROCESSING EQUIPMENT NEEDS

Number of Students in Program × Hours of Instruction Anticipated = $\frac{\textit{Total Instruction Hours}}{\text{80\% of Hours Available During Instructional Term (this allows for breakdowns, etc.)}}$ = Amount of Equipment Necessary

EXAMPLE:

30 Students × 8 Hours of Instruction on MT/ST = $\frac{\textit{240 Instructional Hours}}{\text{(10-week term × 6 hours per day × 5 days per week × 80\%) 240 Available Hours}}$ = 1 Machine Necessary

APPENDIX J

Relationship of Word Processing Competency Instruction to Equipment Availability

This chart indicates the word processing competencies (coded as they appear earlier in this curriculum guide) that can be developed with the kinds of equipment indicated.

Equipment	Competencies		
	Fully Developed	Partially Developed	Not Developed
Minimal (typewriters and tape players)	A-1 B-1 G-1 A-2 B-2 G-2 B-3 A-4 A-5 C-1 C-2 C-3	A-3 D-1 E-1 D-2 D-3 ↓ E-14	F-1 ↓ F-9
Moderate (at least one magnetic keyboard, transcription units, and a dictation unit)	A-1 B-1 D-1 A-2 B-2 D-2 A-3 B-3 A-4 A-5 C-1 E-1 C-2 ↓ C-3 E-14 G-1 G-2	F-1 ↓ D-3 F-9	
Maximum (model office of learning center—w/multiple keyboards, transcription & dictation units, and reprographic equipment)	A-1 B-1 E-1 ↓ ↓ ↓ B-3 A-5 C-1 E-14 ↓ F-1 C-3 ↓ D-1 F-9 ↓ G-1 D-3 G-2		

FEEDBACK

Name _____

Address _____

_____

After you have used this curriculum guide, the authors would appreciate your opinion on its usefulness. Please complete the questions before October 1, 1978, and send to:

Business Education Program
Southern Illinois University
Carbondale, IL 62901

The parts of this Guide that were most useful to me are:

_____

_____

_____

_____

_____

_____

It would have been helpful to me if there had been: _____

_____

_____

_____

_____

_____

_____

Here is an idea for a learning activity pertaining to word processing that might be included in a revision of this guide. _____

_____

_____

_____

_____

_____

_____

_____

_____